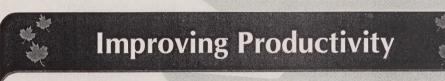




CAI IST -M32

# Micro-Economic Onitor

With the special report:

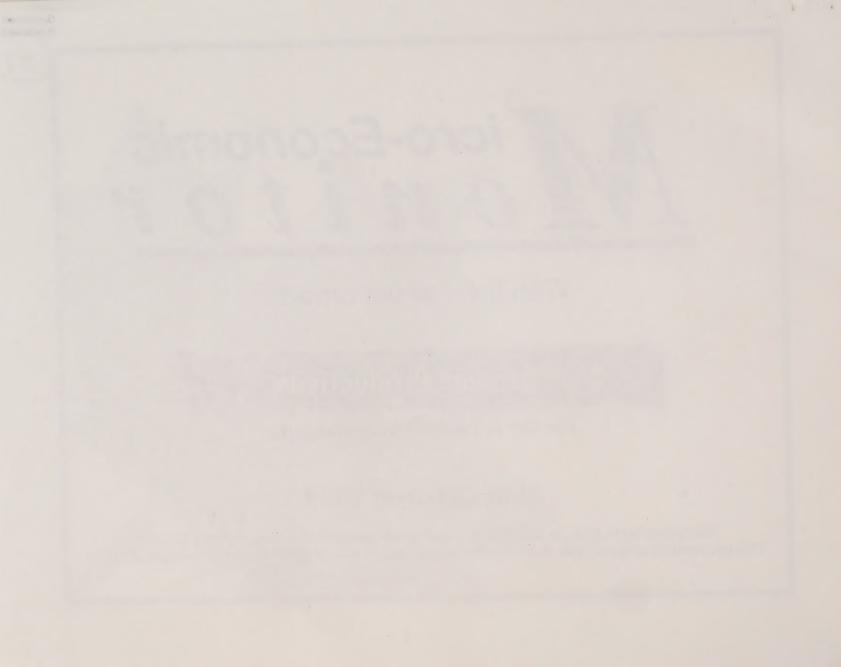


The Key to Higher Living Standards

First Quarter, 1999

Micro-Economic Analysis Directorate, Industry & Science Policy Sector, Industry Canada.

This document is also available on the Internet at http://strategis.ic.gc.ca/sc\_ecnmy/mera/engdoc/04.html



# **Table of Contents**

Overview		A
Domestic Scene		
Real Economic		B
Price Movemer	nts	D
Labour Situatio Financial Varia	bles	F
Fiscal Track Competitivenes		G
International Accoun	ccounts	1
Sectoral Overv	iew	J
Special Feature:		
Improving Product The Key to Higher	tivity - Living Standards	K



Overview

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### Output expands faster than expected in the first quarter of 1999...

Real GDP expanded a stronger-than-expected 4.2% (annual rate) in the first quarter of 1999, with broad-based gains in both domestic and external markets.

- Rebounding consumer confidence resulted in a sharp increase in household purchases of goods and services. The Housing sector also posted a big first-quarter advance, shaking off a prolonged slump.
- Business investment in M&E remained strong, but spending on Non-Residential Construction was weak. However, the outlook for the latter sector is improving, as higher oil prices could lead to increased drilling activity in the oil patch.
- Exports grew nearly twice as fast as imports in the first quarter, leading to a sharply-higher trade surplus and a significant narrowing in Canada's current account deficit. The durable expansion in the U.S. economy bodes well for our future trade performance.

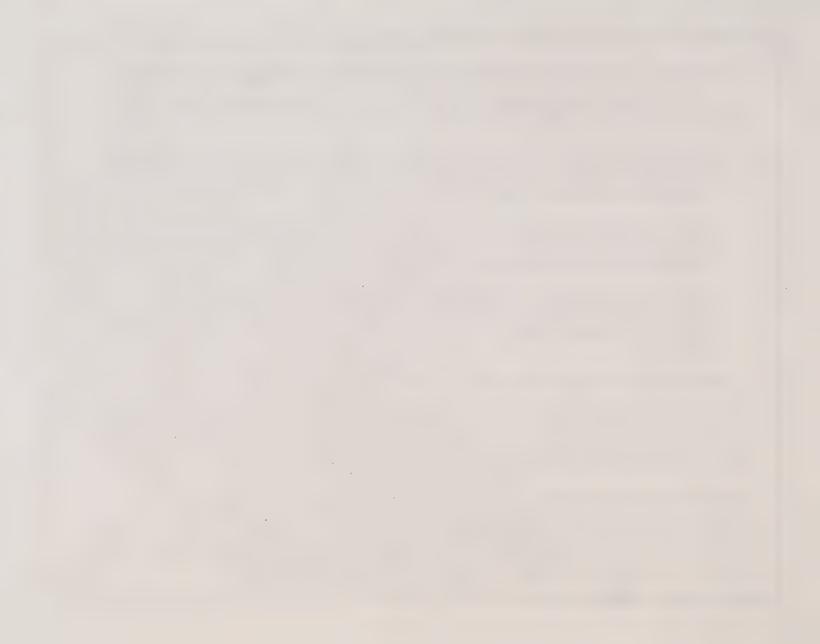
#### ...but growth in income and employment is sluggish

Employment growth has slowed substantially from its very fast pace in 1998, while income growth has failed to keep pace with increases in household spending. Consumers therefore continue to draw on savings and add to debt, casting some doubt on their ability to sustain higher spending without a substantial pick-up in income growth.

Productivity is the single most important determinant of a country's standard of living.

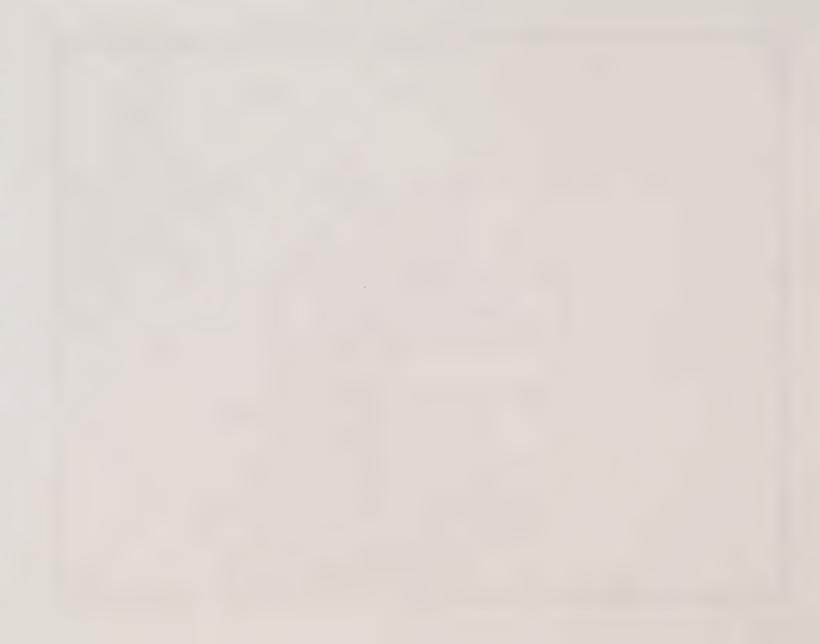
Indeed, this issue's special report, *Improving Productivity: The Key to Higher Living Standards*, demonstrates that the sizeable gap between U.S. and Canadian standards of living largely reflects our lower levels of productivity. Increasing productivity would provide Canada with the greatest capacity to improve its standard of living.

A-1



**Domestic Scene** 

Real Economic Activity



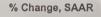
# The economy starts the year strongly...

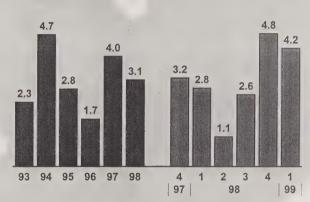
Real GDP rose 4.2% (annual rate) in the first quarter of 1999, the second straight quarter in which growth in the economy has exceeded 4.0%.

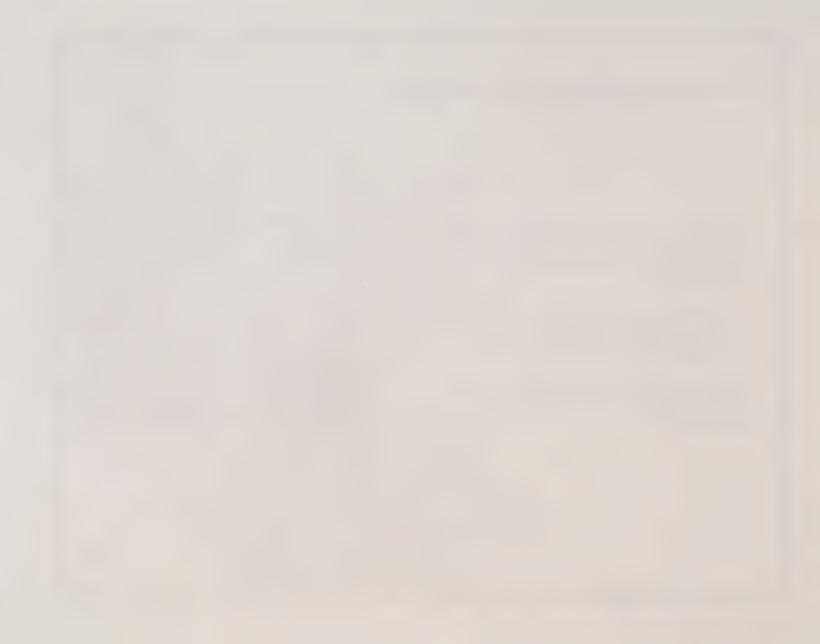
- The first-quarter advance was quite well-balanced, with strength in both domestic demand and export markets.

With this release, real GDP growth for 1998 was revised up to 3.1% from an original estimate of 3.0%.

#### Real GDP Growth







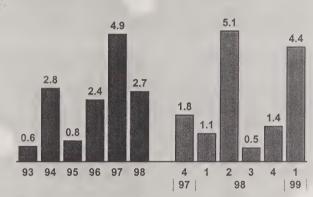
# ...fuelled by strengthening domestic demand...

Final domestic demand increased 4.4% (annual rate) in the first quarter, rebounding from sluggish growth in the last half of 1998.

 Domestic demand was supported by a sharp turnaround in both consumer spending and housing. Business investment in M&E also remained strong.

#### **Final Domestic Demand**

% Change, SAAR





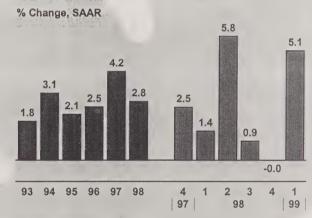
# ...as consumer spending rebounds...

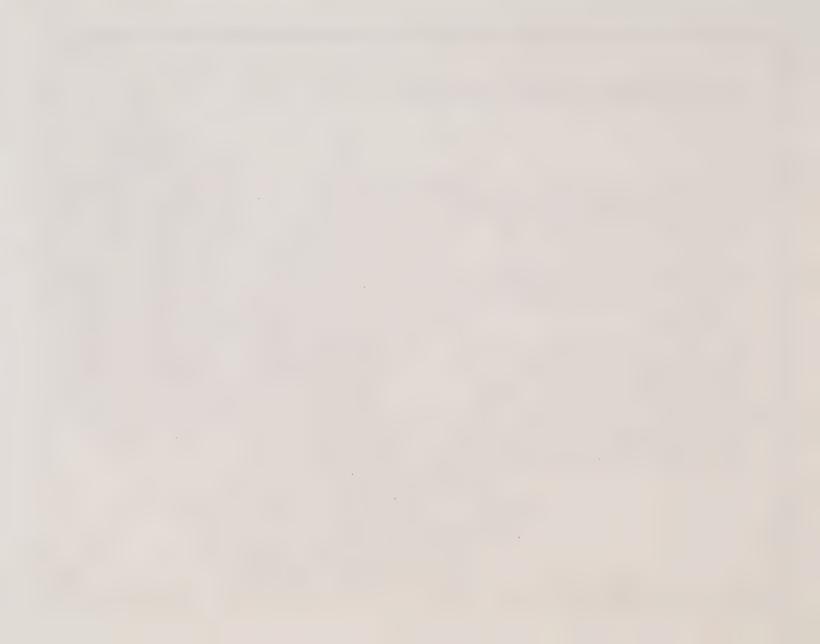
Consumer spending surged 5.1% (annual rate) in the first quarter, rebounding from weak demand in the last half of 1998.

 Spending was up across all major categories, with a particularly sharp increase in purchases of big-ticket durable goods.

Consumer confidence was severely shaken in the first half of 1998 by the falling dollar and rising interest rates (both related to global fallout from the Asia-Pacific crisis). A more stable environment has led to a recovery in confidence, helping explain this quarter's solid rise in household spending.

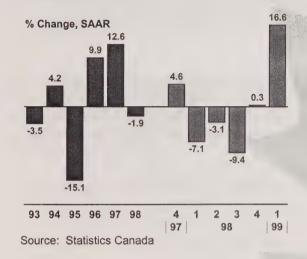
#### Real Consumer Expenditure Growth



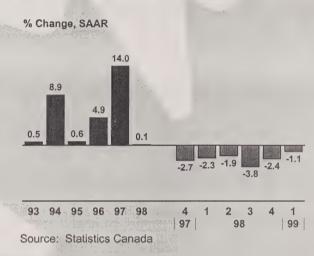


### ...the housing sector posts a sharp gain...

#### Real Residential Construction Growth



#### Real Non-residential Construction Growth

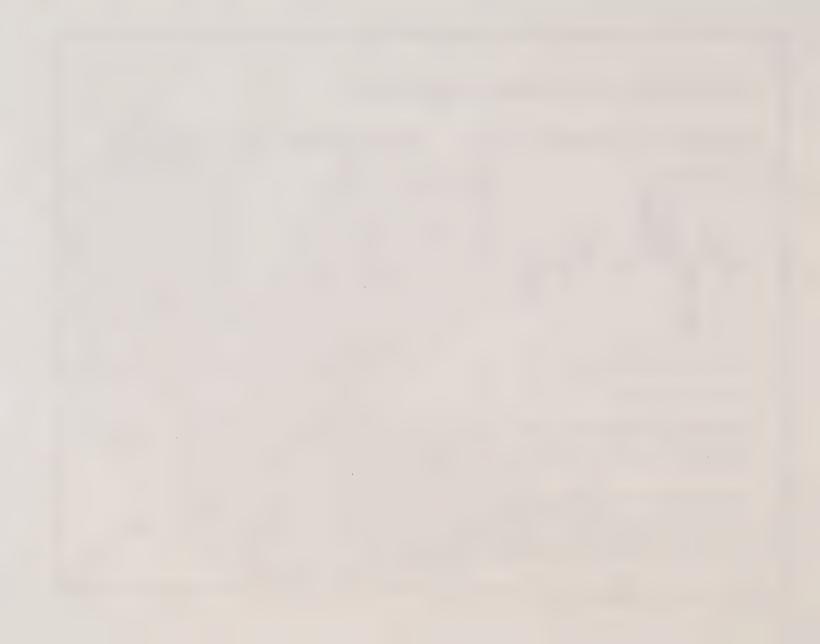


Investment in Housing rose 16.6% (annual rate) in the first quarter of 1999, the first

significant increase in over a year. New housing construction led this advance, but spending on renovations and the resale market were also up.

Non-residential Construction grew strongly through much of 1997, but has since fallen in each of the past six quarters. While the most recent decline resulted from lower spending on both the engineering and building components, the prolonged downturn in this sector is due mainly to reduced engineering construction.

B-4

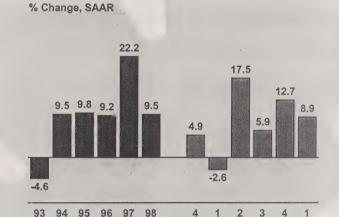


# ...and investment in M&E remains strong

Business investment in M&E was up 8.9% (annual rate) in the first quarter. A large portion of the increase can be attributed to higher spending on computers and other office equipment.

- Purchases of agricultural machinery fell in line with a drop in farm income, but investment in most other categories of M&E recorded modest gains.

#### Real Machinery & Equipment Investment



97

Source: Statistics Canada

99



# The trade sector adds to growth as well

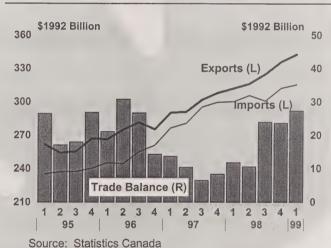
Exports increased by 8.5% (annual rate) in the first quarter of the year, building on gains of more than 10% in the previous two periods.

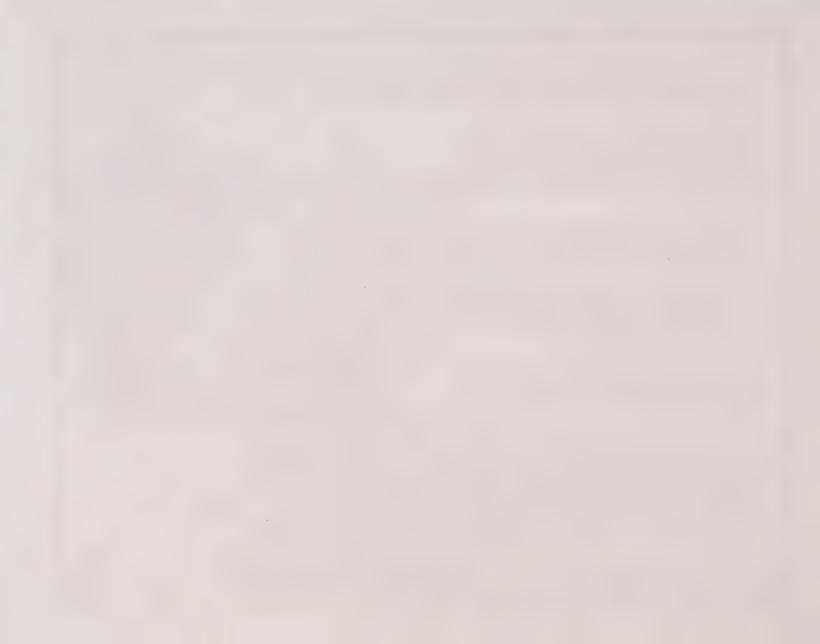
- Export growth was fuelled mainly by higher sales to the surging U.S. economy.
- On a commodity basis, increased exports of Autos and M&E (particularly computers and aircraft) were the main drivers behind the first-quarter gain.

Imports rose 4.2%, with higher spending on M&E (related to higher investment) and Energy Products.

With exports growing twice as fast as imports, Canada's real trade surplus improved considerably, posting an increase equivalent to roughly 40% of the overall output gain in the first quarter.

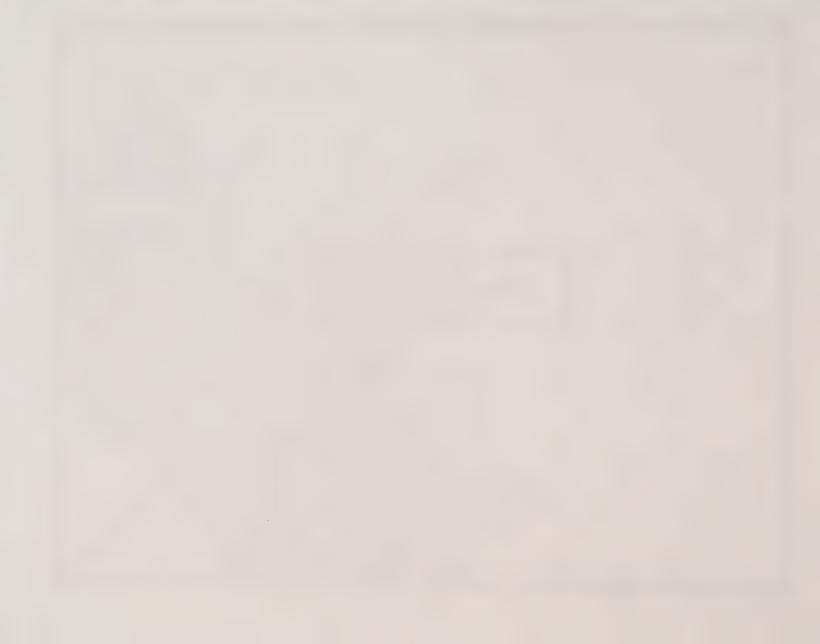
# Real Exports and Imports of Goods & Services





**Domestic Scene** 

Income Side



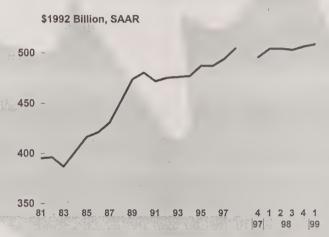
# Sluggish growth in personal income...

#### **Growth in Personal Income**

# % Change, SAAR 6.8 2.0 2.0 2.0 2.2 3.4 2.7 2.7 93 94 95 96 97 98 4 1 2 3 4 1 97 98 99

Source: Statistics Canada

#### Real Personal Disposable Income\*



\*Converted to real dollars using the chain price index for personal expenditure on goods and services. Source: Statistics Canada and Industry Canada

Personal income rose 2.7% (annual rate) in the first quarter of 1999, down from 3.8% in the previous quarter (when income gains were boosted by the end of labour unrest in several key industries).

Disposable income increased more slowly (+2.1%), as income taxes and contributions to social insurance schemes rose at a faster pace than personal income. After adjusting for inflation, disposable income is up only 0.8% on a year-over-year basis.



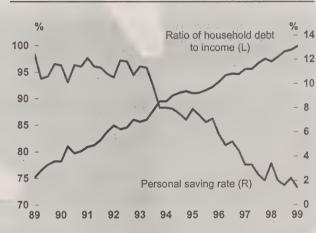
# ...leads to a further weakening in household finances

With growth in consumer spending outpacing income gains, the saving rate dropped 0.8 percentage points to 1.4% in the first quarter of the year.

- This is the lowest saving rate on record (available data extend back to 1961).

Consumers also financed new purchases by incurring debt – both mortgage and consumer credit. As a result, the household debt-to-income ratio rose to a record high 99.9%.

#### **Personal Debt and Savings Rate**

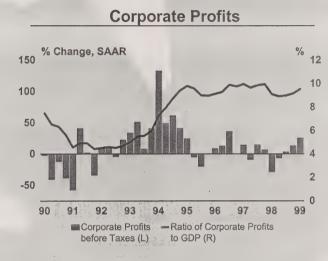




#### Profits recover from losses in the first half of 1998

Corporate profits rose 25.6% (annual rate) in the first quarter of the year, extending their recovery from sharp losses in the first half of 1998.

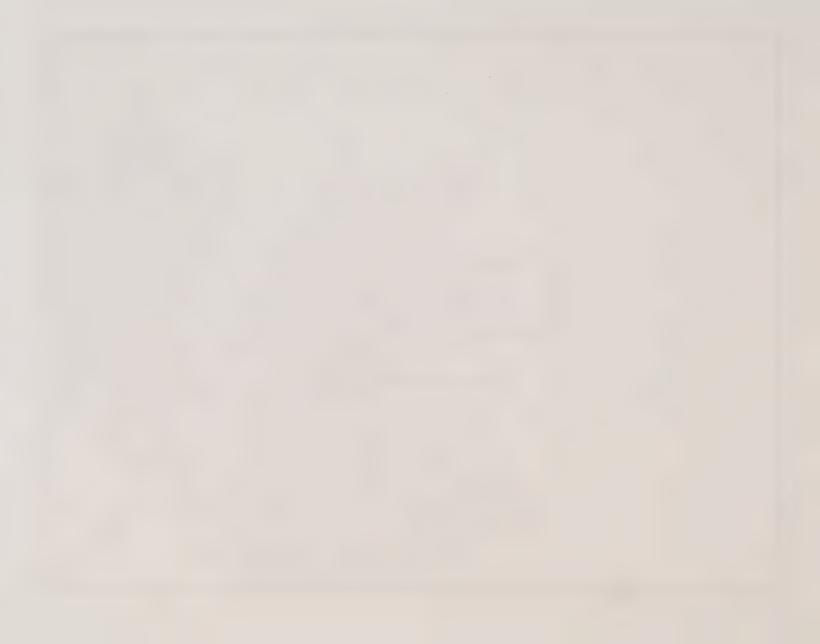
- Profit gains were concentrated in the non-financial industries, notably Transportation Equipment, Business Services and Consumer Goods & Services.
- The first-quarter advance also reflects a modest improvement in the Primary industries, which have benefited from the recent firming of commodity prices.





**Domestic Scene** 

**Price Movements** 



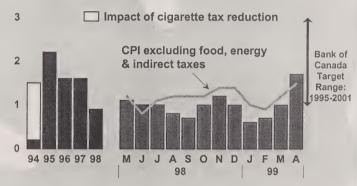
## Inflation rises early in 1999...

After hitting a four year low of 0.6% in January, inflation has increased over the three subsequent months, culminating in April's 0.7 percentage point jump to 1.7%.

The "core" inflation rate – excluding the volatile food and energy components as well as the impact of indirect taxes – was 1.5% in April, within the bottom half of the 1-3% target range set jointly by the Bank of Canada and Department of Finance.

### **Consumer Price Index**

Year-Over-Year % Change



Source: Statistics Canada & Bank of Canada



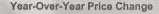
## ...led by higher gasoline prices and other Transportation costs...

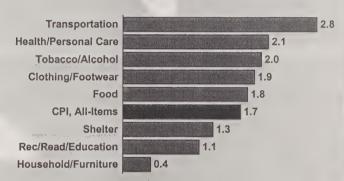
Increased Transportation costs – including price hikes for gasoline, new cars and trucks, and air fares – accounted for roughly one-third of the 1.7% year-over-year rise in the general price level in April.

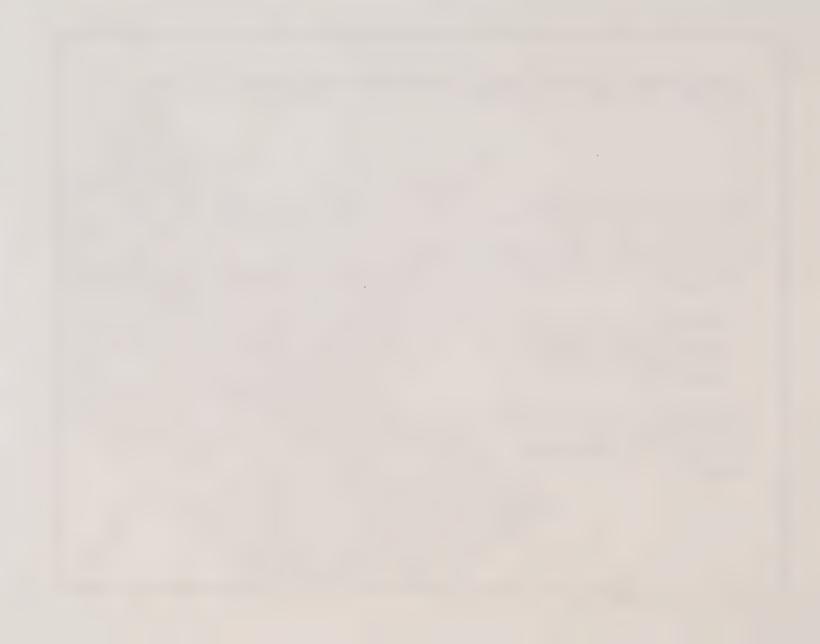
- Gasoline prices were up 5.9% compared to April 1998, the first year-over-year advance since October 1997.

Lower prices for computer equipment and telephone services have put downward pressure on the annual inflation rate.

#### Components of CPI: April 1999





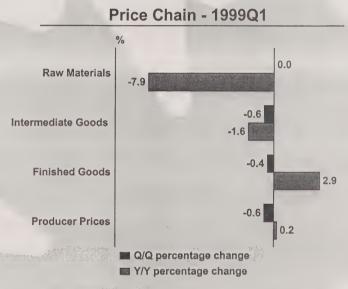


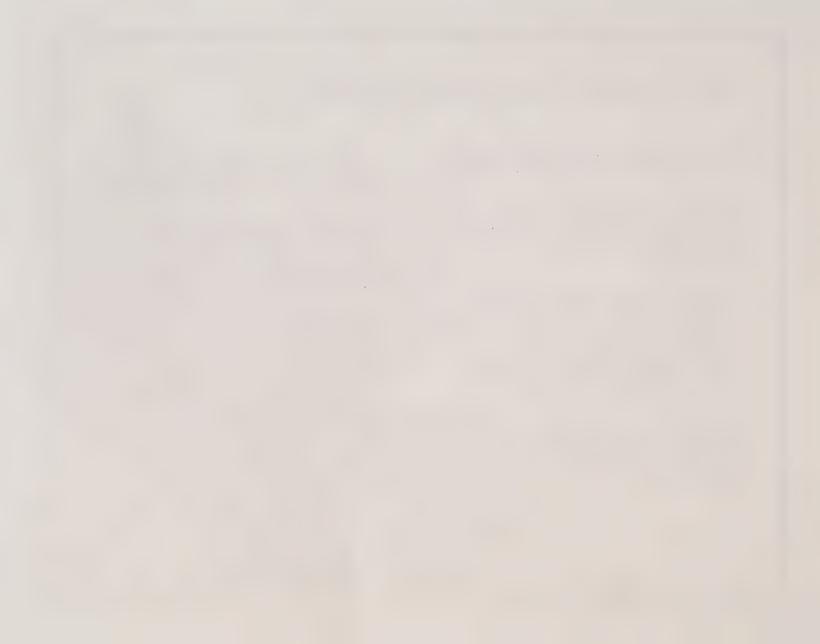
## ...while prices for key commodities remain low

Though flat in the first quarter, prices of raw materials are down on a year-over-year basis.

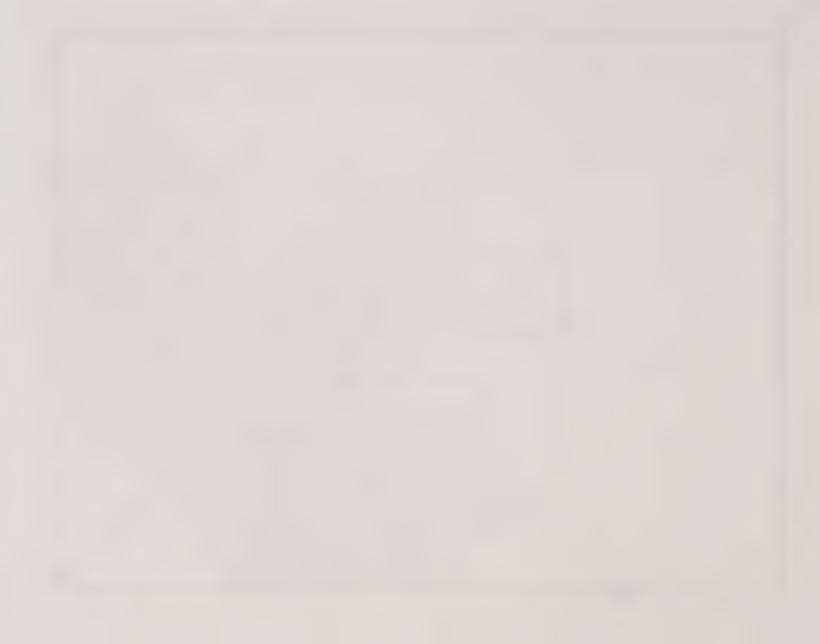
- Lower prices for vegetable products and non-ferrous metals (such as copper, zinc and aluminum) are largely responsible for this decline.
- The price of crude oil has rebounded strongly in recent months. Crude oil prices surged 25.6% in March and a further 16.7% in April on the expectation that OPEC countries will follow through with their commitments to lower production.

Industrial product prices – those received by producers at the factory gate – edged down in the first quarter, but were still up 0.2% on an annual basis.





**Labour Situation** 



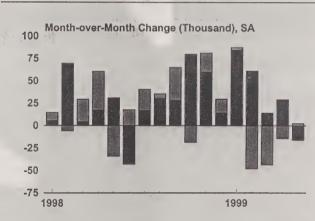
# Employment growth has slowed from last year's fast pace...

Following a net gain of 453,000 jobs in 1998 (the best year this decade for job creation), employment growth has slowed considerably this year.

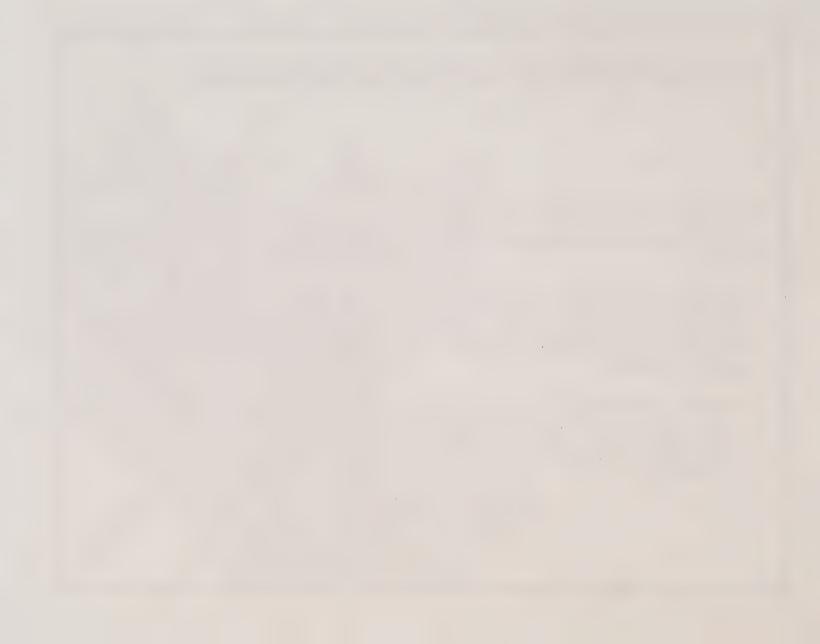
Over the first five months of 1999, the economy has recorded a net increase of only 73,000 jobs – including an exceptional gain of 87,000 jobs in January. Employment fell in both March and May.

 However, it is important to note that 173,000 net full-time jobs were created from January to May. These gains were partly offset by the loss of 100,000 part-time jobs.

### **Employment Growth**



■ Full-Time ■ Part-Time
Source: Statistics Canada



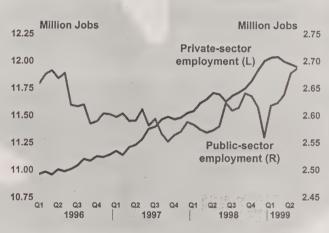
## ...due to job losses in the private sector

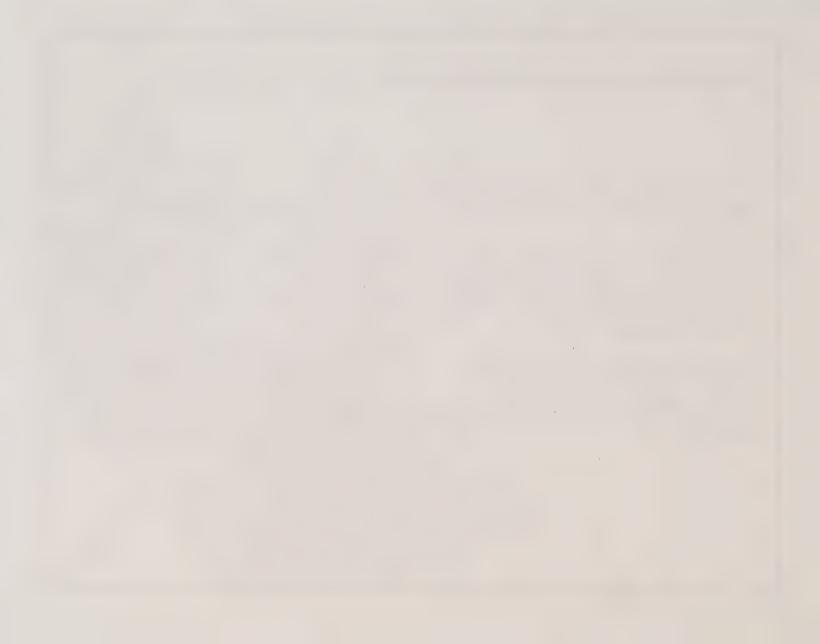
Until quite recently, the private sector had been the main source of new jobs in the economy.

As of May, however, the number of paid employees in the private-sector had fallen by 57,000 on a year-to-date basis. And, the level of self-employment (+3,000) is virtually unchanged.

In contrast, increases in the Health & Social Services and Education industries have driven up public-sector employment by 5% so far this year, for a net gain of 127,000 new jobs.

### **Employment: Private vs. Public**





# Canada's unemployment rate falls back to 8.1% in May...

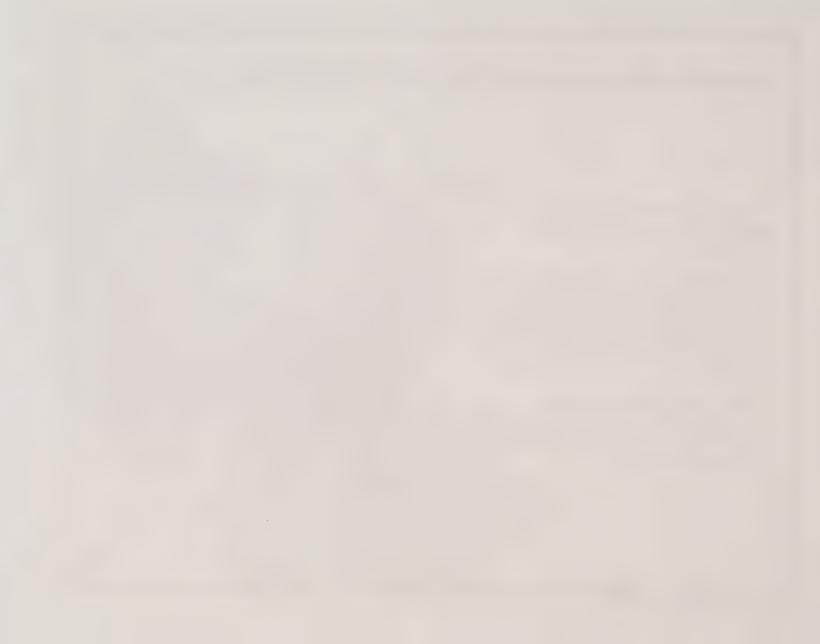
January's significant increase in employment lowered the national unemployment rate to 7.8%.

After holding steady through February and March, the unemployment rate jumped up to 8.3% in April, as a modest rise in employment failed to keep pace with a major surge in the number of job seekers.

In May, a small net job loss was outweighed by a much larger drop in the labour force, lowering the unemployment rate back down to 8.1%.

### **Employment, Labour Force and the Unemployment Rate**





## ...but significant regional differences persist

Job gains have lowered unemployment rates in Manitoba and most Atlantic provinces on a year-to-date basis (including a drop of 1.7 percentage points in Newfoundland).

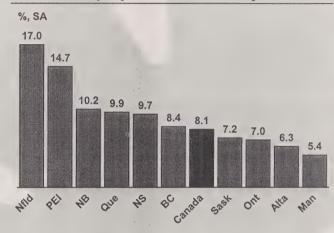
 In New Brunswick, the unemployment rate fell only because a decline in the labour force outpaced job losses.

Job losses in Quebec over the first five months of the year have been matched by fewer job seekers, leaving the unemployment rate unchanged.

Unemployment rates in Ontario and Alberta are up so far this year, as job gains have been offset by larger increases in the labour force.

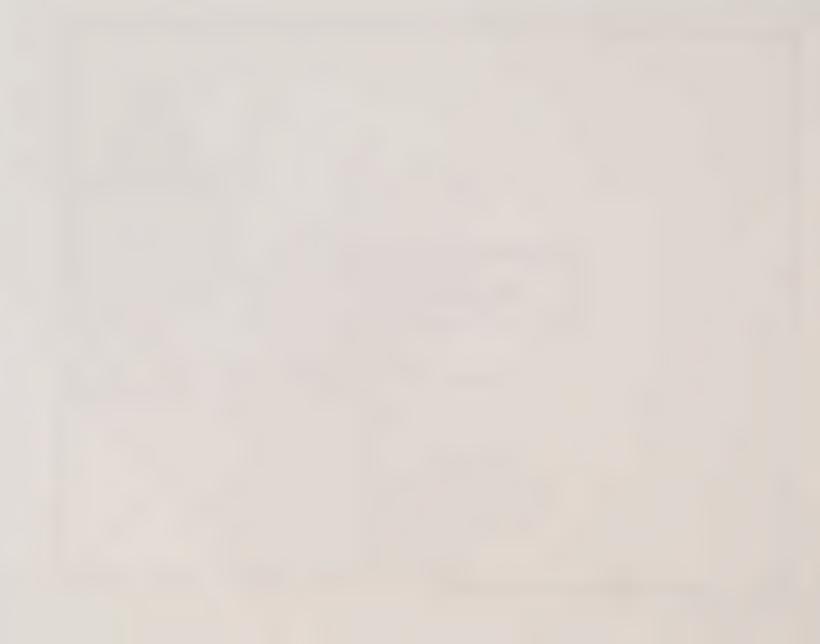
In B.C. and Saskatchewan, lower employment has led to higher unemployment rates on a year-to-date basis.

#### **Unemployment Rates: May 1999**





Financial Variables



## Although fears of U.S. inflation push up bond yields...

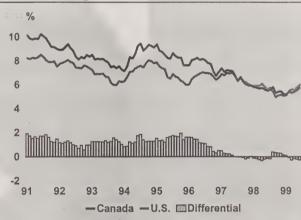
The sustained expansion of the U.S. economy has sparked fears of higher inflation, fuelling expectations of an interest rate hike in the U.S.

In response to these pressures, bond yields have risen on both sides of the border. The long-term Canadian rate has risen more than 30 basis points since the end of April.

 Higher long-term rates have put upward pressure on mortgage rates. The 5-year rate is up nearly half a percentage point compared to December's record low.

As the bond market sell-off has been more pronounced in the U.S., Canadian long rates have been below comparable U.S. yields since February.

### **Long-Term Interest Rates**



Last data point plotted: June 9, 1999

Source: Bank of Canada, Government long-term bond, last Wednesday in the month and June 9, 1999.



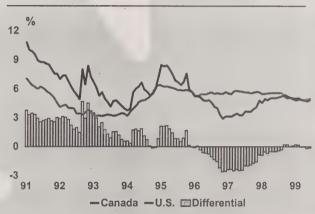
### ...short term rates edge lower in Canada...

The Bank of Canada cut its trend-setting Bank Rate twice, for a total of 50 basis points, between late March and early May.

- At 4.75%, the Bank Rate is now below the level prevailing last August when interest rates were boosted one full percentage point to support the weak Canadian dollar.
- Short term rates in Canada have been slightly below comparable U.S. rates for the past three months.

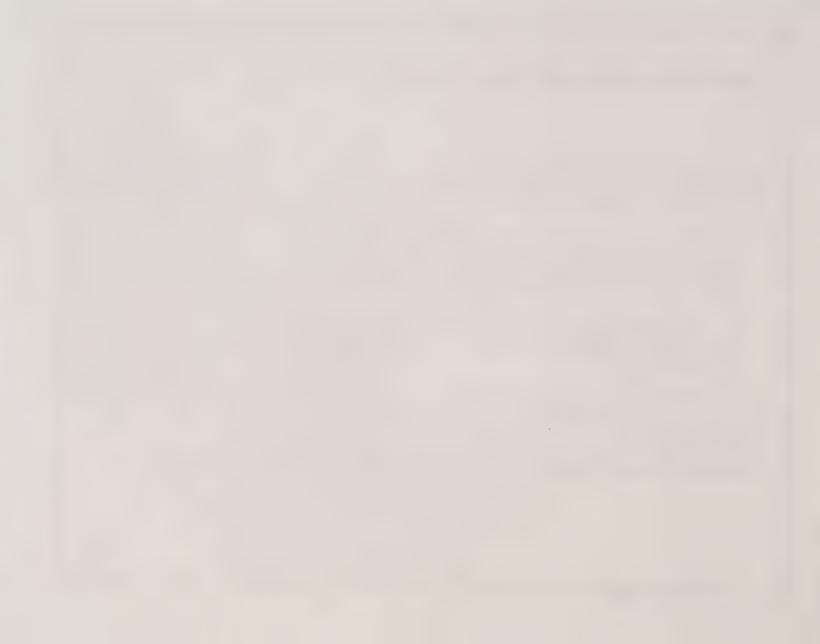
The potential for higher interest rates in the U.S. could prevent further declines in domestic interest rates. The U.S. Federal Reserve recently changed its policy stance from neutral to a bias toward tightening.

#### **Short-Term Interest Rates**



Last data point plotted: June 9, 1999

Source: Bank of Canada, 90-day Commercial Paper, last Wednesday in the month and June 9, 1999.



## ...providing a boost to the domestic stock market

After losing more than twenty percent of its value last August, the TSE 300 composite index is slowly recovering lost ground, breaking the 7,000 barrier in April for the first time since July 1998.

 Stock prices have benefited from an improved outlook for the economy, lower domestic interest rates and a modest firming of commodity prices.

Still, U.S. stocks have vastly outperformed Canadian securities. Compared to July 1998 (just prior to the major impact of the Asian crisis), the S&P 500 index is up 16.2%, whereas the TSE 300 has yet to fully recover, and is down 1.3%.

#### **Stock Market Indices**



Last data point plotted: June 9, 1999 Source: Statistics Canada



## Firming commodity prices provide support to the Canadian dollar

After hitting an all-time low of US63.31¢ in late August, the Canadian dollar has gradually recovered, trading above the US69¢ barrier early in May.

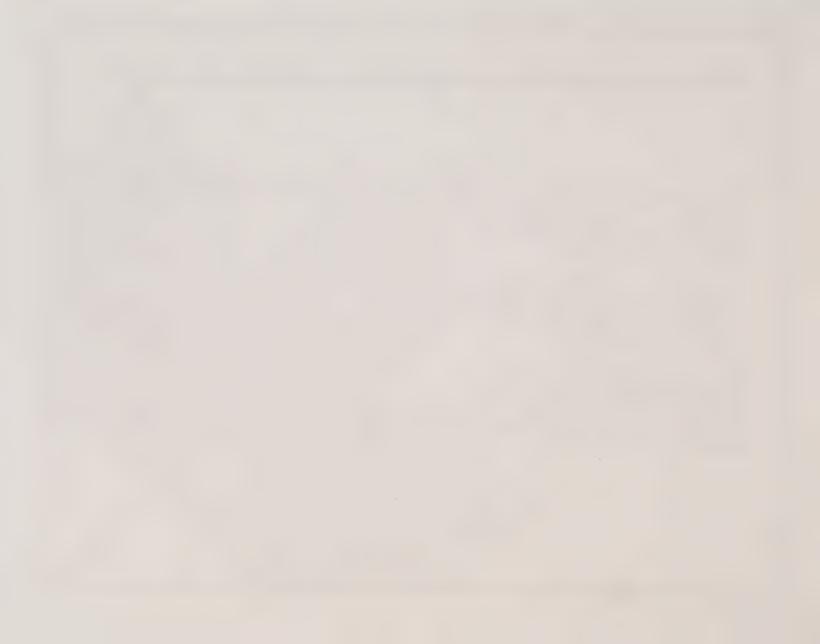
 The dollar has been supported by an improved outlook in the Asia Pacific region, which has led to a modest rebound in commodity prices.

More recently, concern over a widely anticipated interest rate hike in the United States (which the Bank of Canada is not expected to match) has put downward pressure on the Canadian dollar.

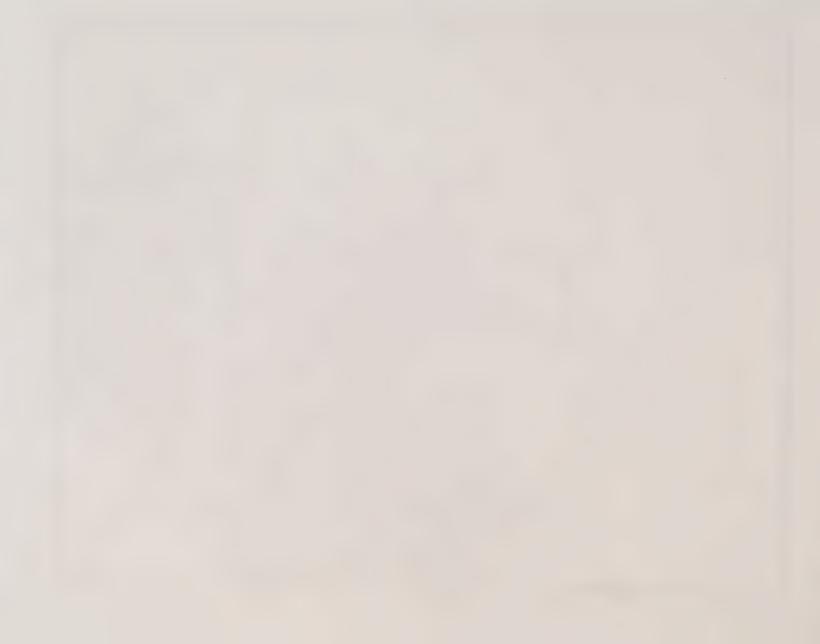


Last data point plotted: June 9, 1999

Source: Bank of Canada



Fiscal Track



## Federal finances on track for balanced budget or better

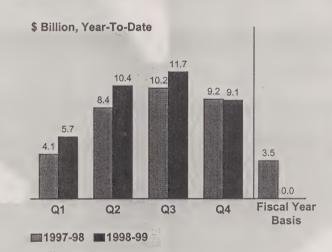
The federal government posted a \$3.5 billion budgetary <u>surplus</u> in the 1997-98 fiscal year, the first in 28 years.

In the 1998-99 fiscal year, prior to end-of-year accounting adjustments, the government recorded a <u>surplus</u> of \$9.1 billion – roughly the same as in the previous fiscal year.

- The budget is expected to be in balance once end-of-year adjustments are made. If not needed, the \$3 billion Contingency Reserve will be put toward debt reduction.
- By the accounting standards used elsewhere, the federal government posted a financial surplus of \$10.8 billion last year.

Other levels of government have also been successful in reducing budget deficits. Along with the federal government, seven provinces and one territory are expected to post balanced budgets or surpluses in the current 1999-2000 fiscal year.

### Federal Budgetary Balance



Source: Department of Finance



Competitiveness

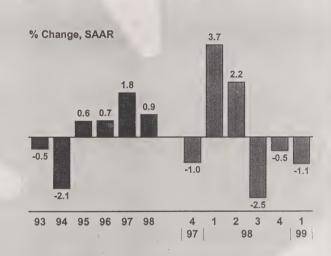


## Unit labour costs fall for the third straight quarter...

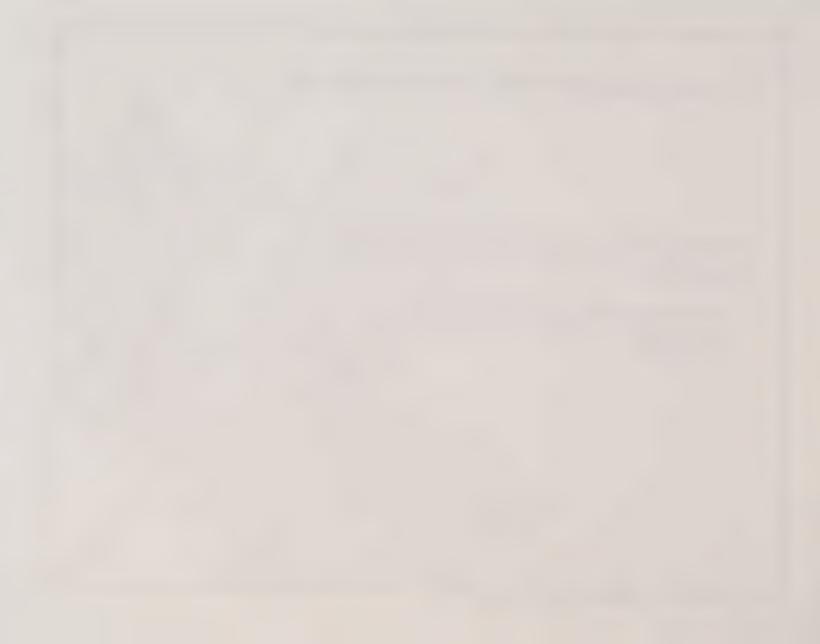
Unit labour costs fell 1.1% (annual rate) in the first quarter of 1999, the third drop in as many quarters.

- Total output expanded by 4.2% (annual rate), exceeding the 3.1% growth in the total wage bill.

#### **Growth in Unit Labour Costs**



Source: Industry Canada calculations



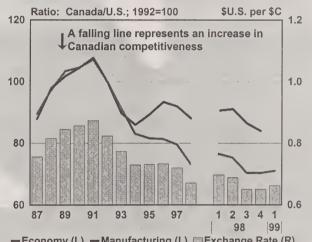
## ...but a stronger dollar hurts Canada's competitive position

Canada's competitive position improved sharply in 1998, owing mainly to a sharp drop in the value of our dollar.

However, Canada's competitive position deteriorated slightly in the first quarter of 1999. At the economy-wide level, and on a common currency basis, Canadian unit labour costs rose 1.0% relative to those in the U.S.

- The Canadian dollar, which appreciated by more than a full U.S. cent over this period, was responsible for this decline.
- Apart from the exchange rate, Canadian firms were more successful in controlling costs in the first quarter. Unit labour costs rose slightly in the U.S., but fell in Canada.

### **Unit Labour Cost Comparison (\$US)**



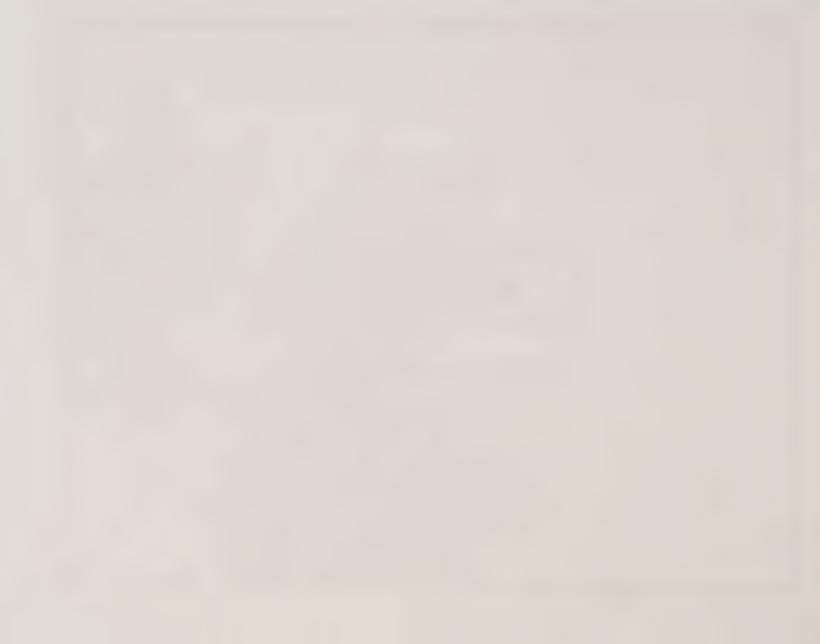
- Economy (L) - Manufacturing (L) ■ Exchange Rate (R)

Note: Quarterly manufacturing ULC for 1999Q1 are not yet available. Source: Industry Canada estimates based on data from the U.S. Bureau of Labor Statistics & Statistics Canada



**Domestic Scene** 

International Accounts



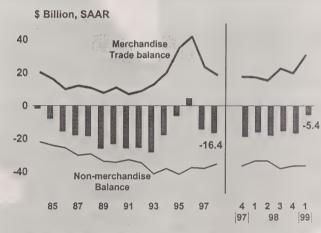
## The current account deficit narrows in the first quarter...

Canada's current account deficit narrowed significantly in the first quarter, owing to a large jump in the merchandise trade surplus.

- The current account deficit fell from \$16.5 billion (annual rate) in the fourth quarter to \$5.4 billion in the first quarter, the best result in two years.

Canada's net position on the financial and capital account was roughly unchanged, with Canadian international assets and liabilities falling by similar amounts.

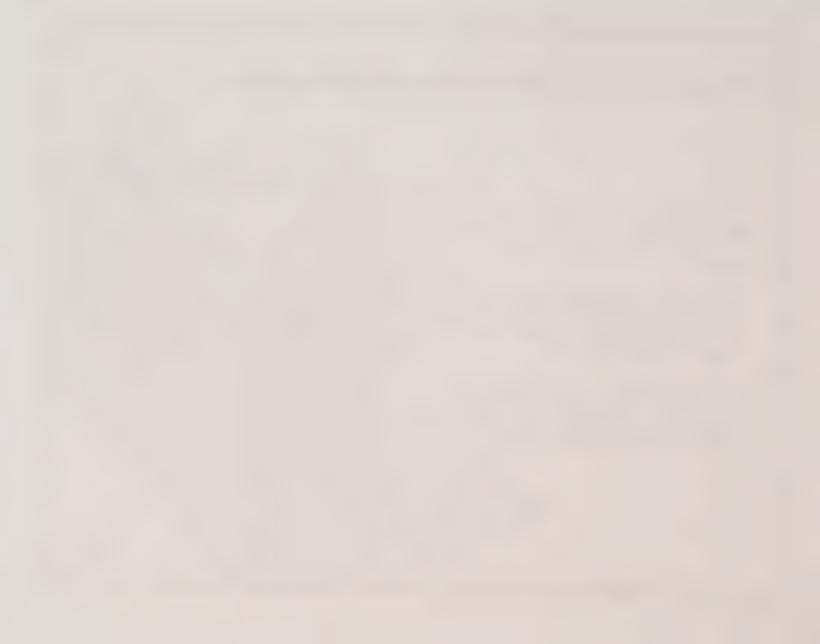
#### **Current Account & Trade Balances**



The merchandise trade balance represents net exports of goods.

The non-merchandise trade balance represents net exports of services plus net receipts of investment income and transfers.

Source: Statistics Canada



## ...due to a sharp rise in Canada's surplus on trade in goods

Canada's merchandise trade surplus rose sharply in the first quarter, reaching a two-year high of \$30.8 billion (annual rate).

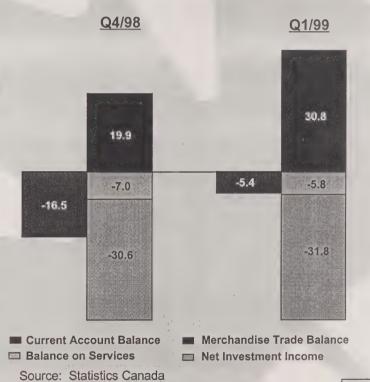
 Exports of goods increased 1.7%, boosted by higher sales of motor vehicles and M&E to the surging U.S. economy. Imports posted modest but widespread declines on the quarter (-1.6%), after advancing strongly in the previous period.

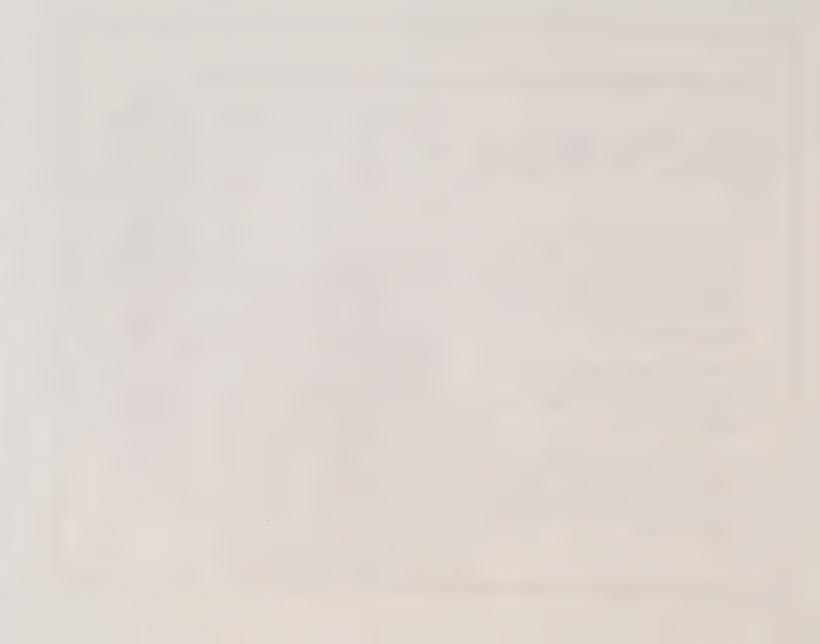
The deficit on trade in services fell to an eleven-year low in the first quarter, reflecting lower deficits on travel and commercial services.

Lower profits on Canadian direct investment abroad, primarily in the energy and financial sectors, led to a slight increase in Canada's deficit on investment income.

#### **Main Components of the Current Account**

\$ Billion, SAAR





## Exports to the U.S. are up strongly on a year-over-year basis...

Although growth in merchandise exports slowed in the first quarter, shipments are still up 10.8% on a year-over-year basis.

 This increase is due solely to strong demand from the robust U.S. economy. Exports to the rest of the world have fallen.

By commodity, exports of Automotive Products, M&E (notably aircraft) and Other Consumer Goods registered strong gains compared to last year.

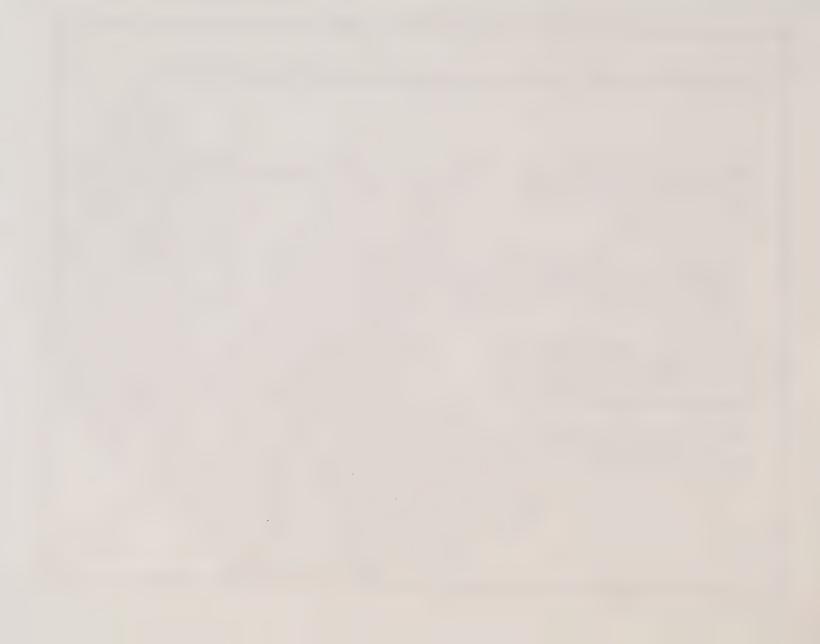
Resource-based exports tended to be weaker, with the exception of Forestry Products.

#### Merchandise Exports, 1999Q1 % Change. \$ Billion Jan-Mar/98 - Jan-Mar/99 10.8 Total 86.9 **By Trade Partner** U.S. 74.3 2.2 -9.7 Japan E.U. 4.4 -4.4 6.0 -14.4 All Others By Principal Commodity Agricultural & Fishing Products 6.3 **Energy Products** 5.6 -5.2 **Forestry Products** 9.4 13.9 -3.8 Industrial Goods & Materials Machinery & Equipment 20.5 10.1 **Automotive Products** 24.5 30.1

3.4

Source: Statistics Canada

Other Consumer Goods



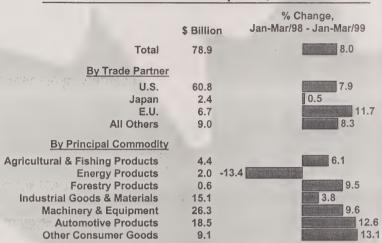
## ...outpacing the rise in imports

Exports to the U.S. have risen twice as fast as imports over the past year. Canada's surplus with the U.S. therefore rose to \$13.5 billion in the first quarter of 1999, up \$5.4 billion from the same period last year.

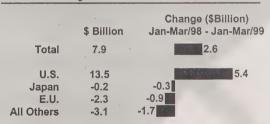
- Given lower exports elsewhere, Canada's trade deficit with all other regions was higher in the first quarter on a year-over-year basis.

By commodity, imports fell across all major groups in the first quarter, but are still up 8.0% compared to a year ago. Energy Products is the only major group for which imports were down on the year.

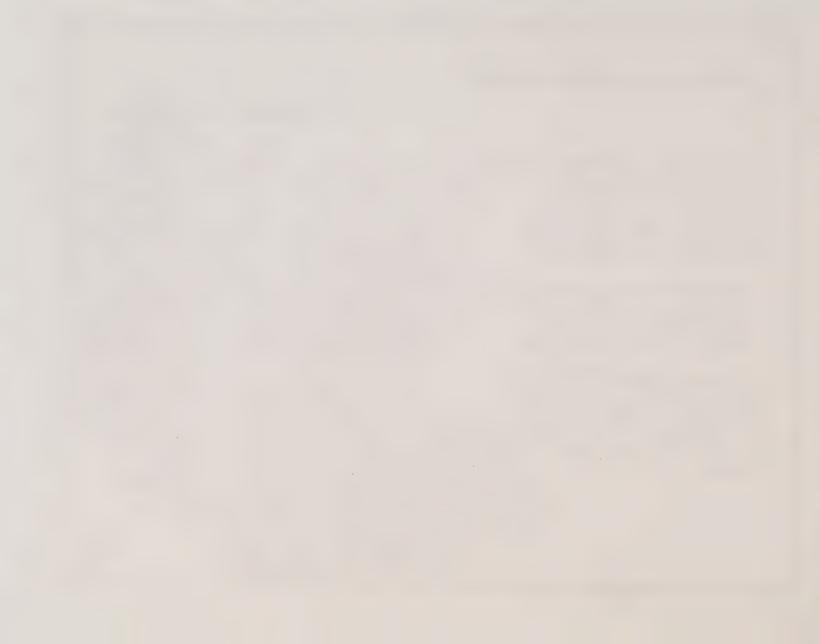
#### Merchandise Imports, 1999Q1



#### **Balance by Trade Partner, 1999Q1**



Source: Statistics Canada



**Domestic Scene** 

Sectoral Overview



## Output expands in most sectors in the first quarter...

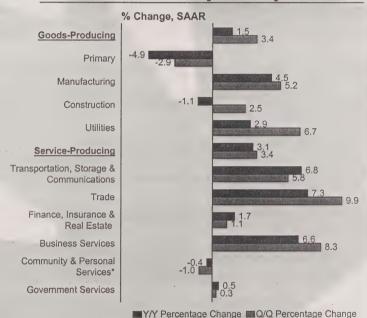
Output in the Goods-producing industries rose 3.4% (annual rate) in the first quarter of 1999, building on a solid gain in the previous period.

- Manufacturing industries opened the year strongly, aided by rising sales to the surging U.S. economy. Utilities also posted a very robust gain.
- Within the primary industries, Mining remains affected by low global demand.
   Wood production was curtailed by quota restrictions under the Canada-U.S. softwood lumber agreement.

The Service sector also expanded 3.4% (annual rate) in the first quarter.

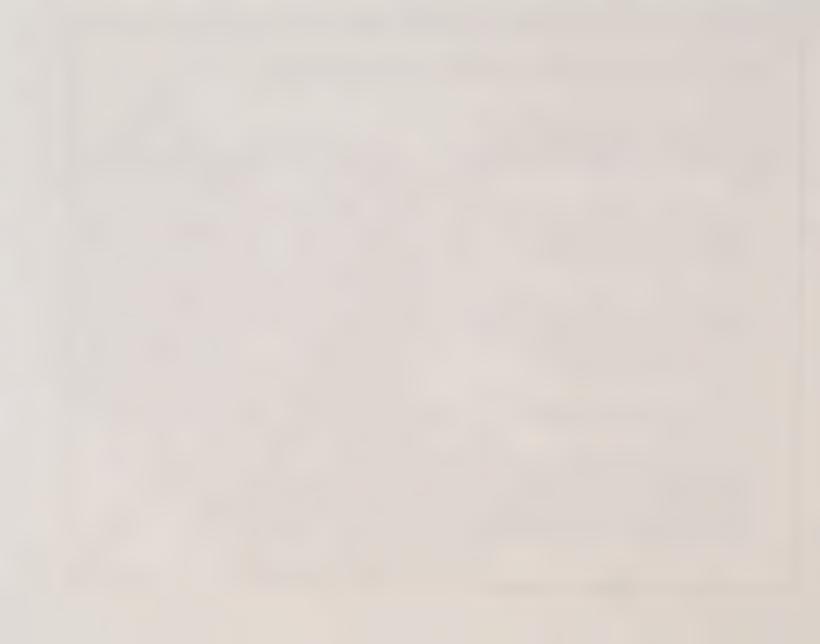
- Strong demand for Business Services (especially computer services) and Trade led the advance. Higher demand for telecommunication services fuelled output gains in the Communications Industry.

#### Real GDP Growth by Industry: 1999Q1



Source: Statistics Canada

\*Education and Health & Social Services



## ...driving up capacity utilization rates

Capacity utilization in the Non-farm Goodsproducing industries increased 0.5 percentage points to 83.1% in the first quarter of 1999.

 Higher production, due to increased sales to the U.S. market and robust domestic demand, led to the second consecutive rise in overall capacity use.

In Manufacturing, capacity utilization rose one full percentage point to 85.7% in the first quarter, with 14 of 22 major groups reporting higher rates (particularly producers of durable goods).

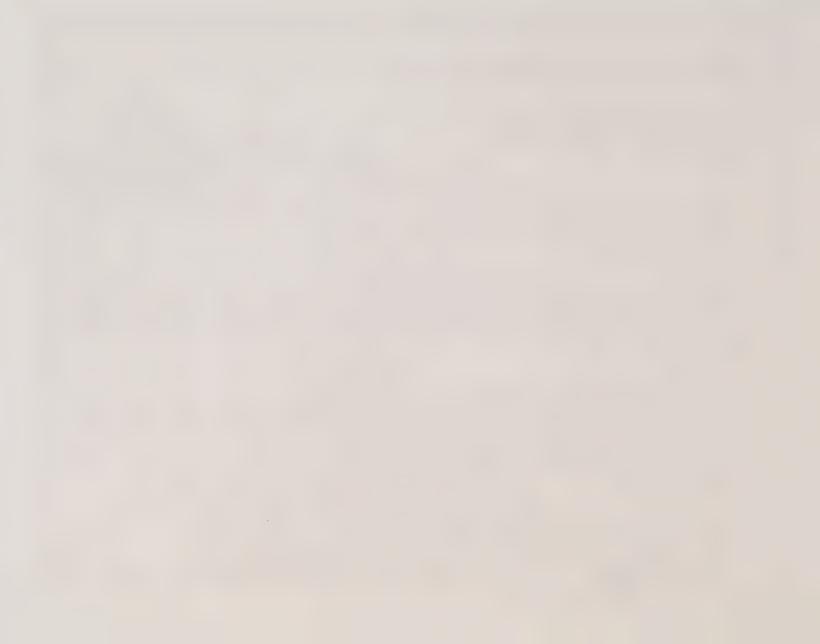
Outside of Manufacturing, higher activity in mining services and increased diamond production buoyed capacity use in Mining & Quarrying. However, reduced production led to lower utilization rates in the Oil and Natural Gas sector.

 Capacity utilization in Logging & Forestry fell for the first time in three quarters, held back by heavy snowfall in B.C. and sawmill shutdowns.

# Capacity Utilization: Non-farm Goods-producing Industries

en en ermer voje en en en em	Level (%) 1999Q1	Change Q/Q	(% points) Y/Y	10-year Average
Total Non-Farm Goods-Producing	83.1	0.5	-0.3	81.5
Logging & Forestry	84.4	-1.9	-0.6	83.0
Mining & Quarrying	77.2	3.5	-7.8	84.1
Crude Petroleum & Natural Gas	69.9	-3.4	-8.5	82.2
Manufacturing	85.7	1.0	1.7	80.5
Durable Goods Manufacturing	86.4	1.6	2.2	79.3
Primary Metals	92.1	6.1	0.0	87.6
Fabricated Metals	82.7	1.5	2.1	76.9
Transportation Equipment	90.2	0.2	5.4	79.5
Electrical & Electronic Products	88.2	5.6	9.0	78.0
Non-Durable Goods Manufacturing	84.9	0.3	1.0	81.9
Food Products	82.6	-0.5	1.8	80.0
Paper & Allied Products	90.6	3.0	3.2	88.5
Printing & Publishing	82.9	-0.5	0.3	79.6
Chemical & Chemical Products	82.0	-1.1	-3.5	84.1
Construction	83.2	0.5	-1.1	83.1
Electric Power & Gas	82.4	1.0	1.6	82.4
Energy	77.1	-1.1	-3.1	82.6
Total Excluding Energy	84.6	1.0	0.5	81.3

Source: Statistics Canada



## Employment in Manufacturing is up sharply so far this year...

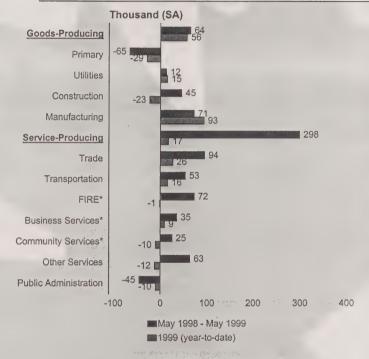
Within the Goods-producing industries, Manufacturing has been the primary engine of job creation over the first five months of 1999.

- Employment in Manufacturing has surged by 93,000 so far this year, following a flat performance in 1998.
- Job losses have occurred in the Primary industries and Construction, though employment in the latter is still up on a year-over-year basis.

Employment in the Service-producing sector was little changed over the first five months of 1999 (+17,000).

 However, this result masks significant differences in public and private sector job creation figures. In Education and Health & Social Services, a substantial drop in private-sector employment has been largely offset by sizeable gains in the public sector.

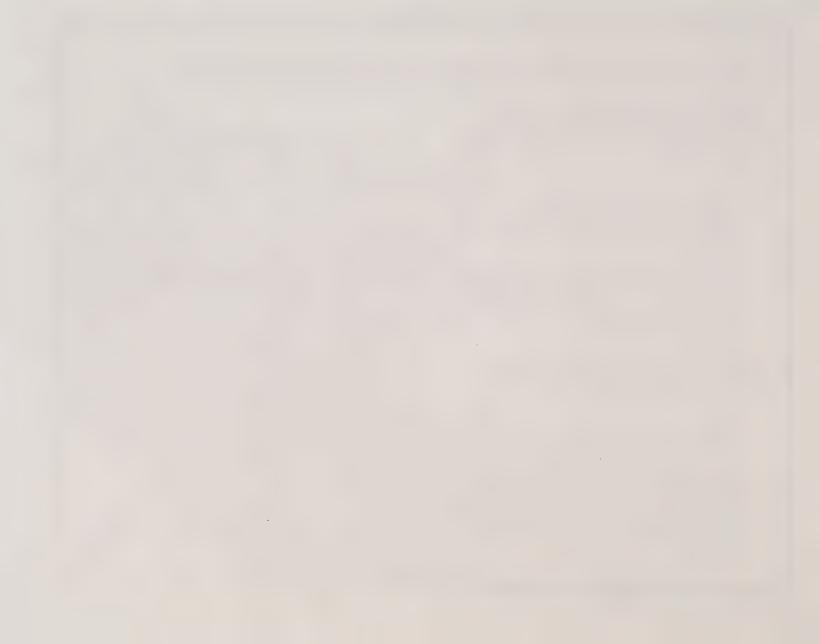
#### Job Growth by Industry



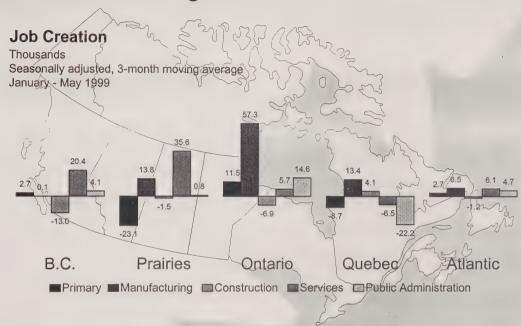
#### Source: Statistics Canada

\*FIRE: Finance, Insurance, Real Estate and Leasing
Business Services: Management, Administrative, Professional, Scientific & Technical Services
Community Services: Educational Services, Health & Social Assistance.

J-3

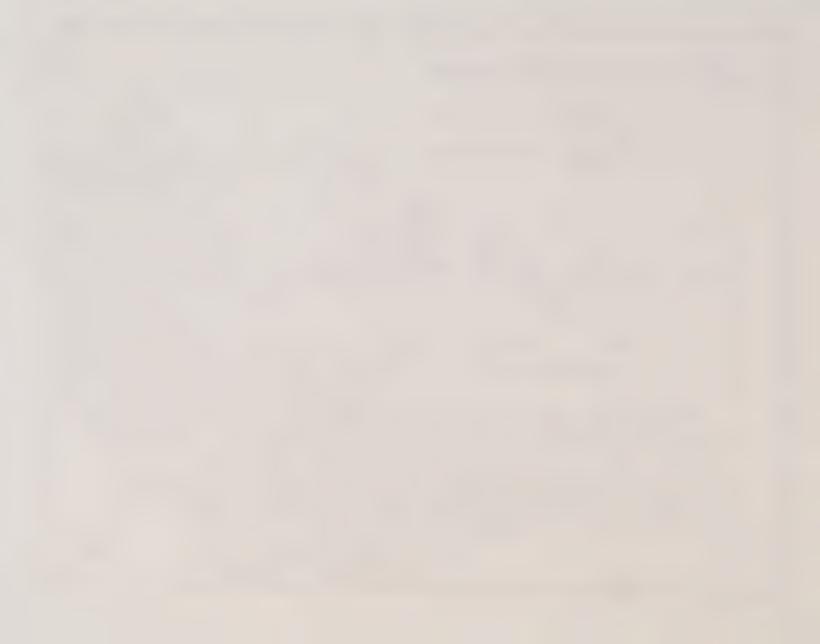


## ...with gains across most regions



So far this year, employment gains have been widespread in Ontario and the Atlantic region. In both cases, Construction is the only major area in which employment has fallen. For Ontario, Manufacturing has led job gains by a wide margin.

The Service sector has led overall job gains in the Western provinces in the first five months of 1999. In Quebec, employment in Manufacturing and Construction is up, but other sectors have registered job losses.



## Still, wage settlements remain stable

Major wage settlements averaged 1.5% in the first quarter of 1999, down slightly from the 1.6% overall average in 1998.

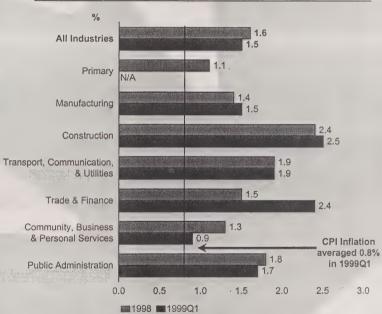
 As in 1998, wage settlements outpaced increases in the CPI in all major industry groups in the first quarter.

The highest average wage settlements in the first quarter were in Construction (+2.5%) and Trade & Finance (+2.4%).

Wage settlements were lowest in Community, Business & Personal Services (+0.9%). This was the only industry to experience a significant slowdown in wage settlements in the first quarter compared to the 1998 average.

Private sector wage settlements averaged 2.2% in the first quarter, compared to 1.3% in the public sector.

#### Wage Settlements by Industry



Effective average annual adjustments in base wage rates from major collective bargaining agreements.

Source: Human Resources Development Canada





Industrie Canada



# **Improving Productivity**



The Key to Higher Living Standards



## High productivity is key to a high standard of living

Productivity is the most important determinant of a country's standard of living.

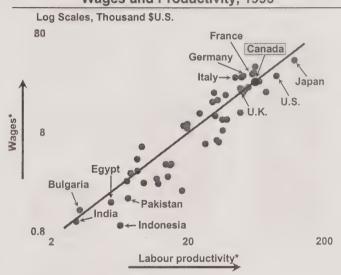
By international standards, Canada is doing relatively well, displaying both high productivity <u>levels</u> and a high standard of living.

- But, Canada can and should do better.

Productivity growth is the key to maintaining and improving living standards — it gives us the biggest "bang for the buck".

Conference Board Performance & Potential, 1997

#### The Impacts of One's Productivity Performance Wages and Productivity, 1993



\* In manufacturing Source: International Yearbook of Industrial Statistics, 1998; Rodrik (1998)



## Canada's standard of living is considerably below that of the U.S.

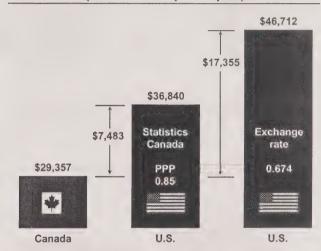
Compared to Canada, the average standard of living in the United States is significantly higher.

- In 1998, based on the range of estimates of purchasing power parity (83 to 85 cents), real per capita income was 25% to 30% higher in the U.S. than in Canada.
- This is reflected in Canadians' spending patterns. For example, the best-selling car purchased in Canada costs \$15,700, while in the U.S. it costs \$21,348.

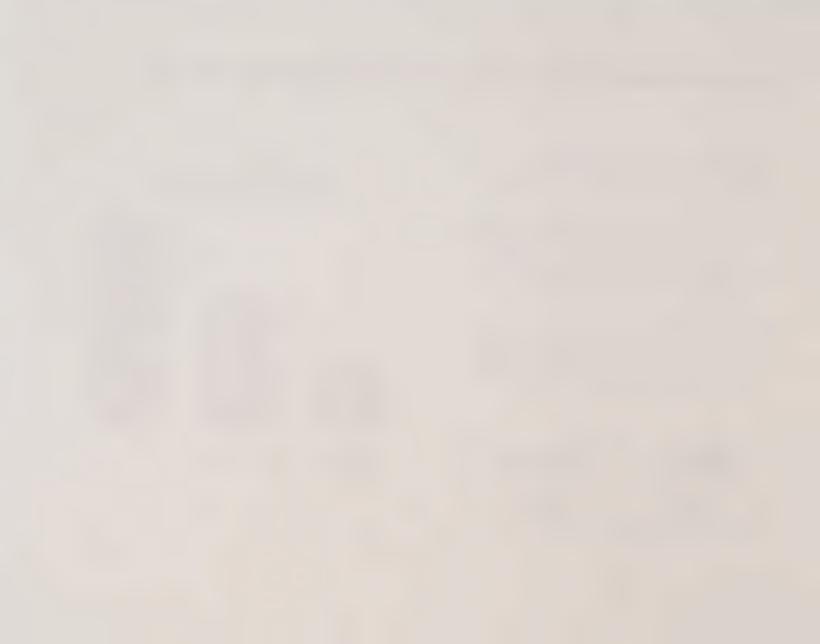


Source: DesRosiers Automotive Yearbook, 1998.

## 1998 Standards of Living (Real Income per Capita)



Source: Statistics Canada, U.S. Bureau of Economic Analysis and Conference Board



Canada's lower standard of living largely reflects our lower levels of productivity

Sources of the Income Gap

The per capita real income gap between Canada and the U.S. can be attributed to only two factors:

- a lower level of productivity; and
- a lower employment rate.

Lower labour productivity has explained on average about 96% of the Canada-U.S. standard of living gap throughout the decade.

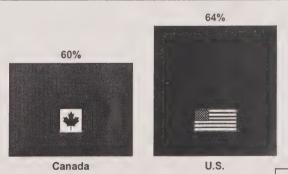
 In 1998, lower labour productivity accounted for about 83% of the real per capita income gap — which is low by historical standards, and a lower employment rate accounted for 17% of the gap in real per capita incomes.

Creating jobs is important, but so is improving productivity: if the employment situation in Canada was as good as in the U.S., per-capita income would increase by \$1,300, but would still be more than \$6,000 below that of the U.S. because of our lower productivity.



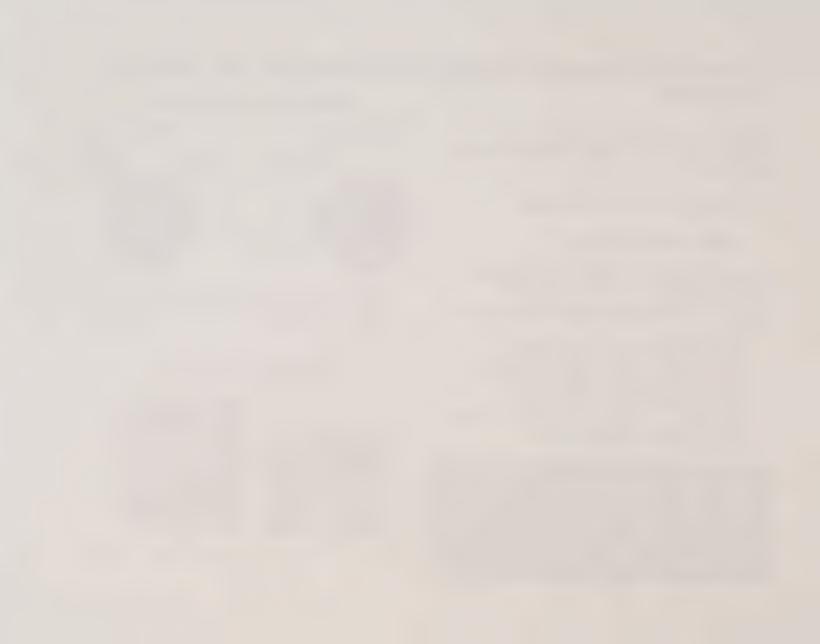
\* Total hours worked per capita, based PPP=0.85 Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics and OECD

#### **Employment Rate, 1998**



Source: Statistics Canada, U.S. Bureau of Labour Statistics

K-3



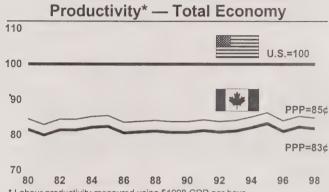
## Clearly, Canada's levels of productivity are well below the U.S. ...

For the overall economy, the gap between productivity levels in Canada and the U.S. are large (15% to 20%) and have been relatively constant for 20 years.

And, in the manufacturing sector, the gap in productivity levels has increased, and was over 25% in 1997.

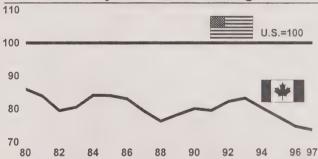
In comparison to other key world economies, our productivity has been slipping.

- Our level of productivity (for the overall economy) was ranked second only to the U.S. in 1976. Two decades later, it has slipped to fifth place among the G-7.



\* Labour productivity measured using \$1998 GDP per hour. Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics and OECD. Canada-U.S. comparisons are made using range of estimates for purchasing power parity (PPP).

## Productivity\* — Manufacturing Sector



<sup>\*</sup> Labour productivity for the manufacturing sector is measured by GDP per hour. Source: Statistics Canada, U.S. Bureau of Labour Statistics; based on the methodology of the Centre for the Study of Living Standards

| K-4



## ...and little progress has been made in closing these productivity gaps over 20 years

Over the last twenty years, for the total economy. labour productivity has grown at about the same rate in Canada as in the U.S. Hence the Canada-U.S. productivity gap for the total economy is large and unchanged.

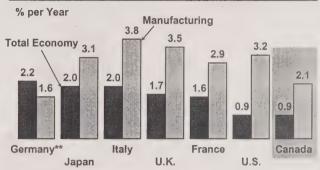
In Manufacturing, labour productivity growth in Canada was significantly slower than that in the U.S. Hence the Canada-U.S. manufacturing productivity gap is large and has widened.

In comparison to key world economies, our productivity report card is no better. In terms of productivity growth, we rank at or near the bottom among the G-7 economies.

- Our level of labour productivity was ranked second only to the U.S. in 1976. Two decades later, it has slipped into fifth place among the G-7.

Canada's productivity growth considerably outpaced that in the U.S. in 1997, but this result was abruptly reversed in 1998. This demonstrates the need to focus on underlying trends when analysing productivity, rather than results for one specific year.

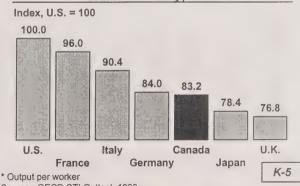
#### G-7 Labour Productivity Growth\* Total Economy and Manufacturing, 1979-97



\* Output per employed person

\*\* West Germany, and total economy refers to business sector. Source: OECD National Accounts for Total Economy and Bureau of Labour Statistics (March 16, 1999) for Manufacturing, 1979 was chosen as the base year for comparison as this period preceded the global 1980 recession. Moreover, this time period is commonly used by international organizations such as the OECD.

#### Labour Productivity\* Total Economy, 1996



Source: OECD STI Outlook 1998



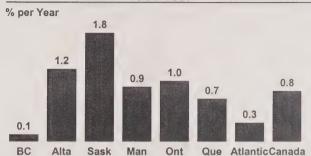
This weak productivity performance relative to the U.S. holds regionally

Productivity\* Growth 1984-1997

Productivity growth has shown considerable regional variation in Canada over the past 15 years.

Alberta and Ontario currently show the highest <u>levels</u> of productivity in Canada.

However, <u>all</u> provinces have productivity levels well below that of the <u>average</u> U.S. productivity level.



\* Labour productivity for the total economy; based on GDP at factor cost per worker.

Source: IC calculations based on Statistics Canada data

## Productivity\* 1995-1996 average

Index: Canada = 100

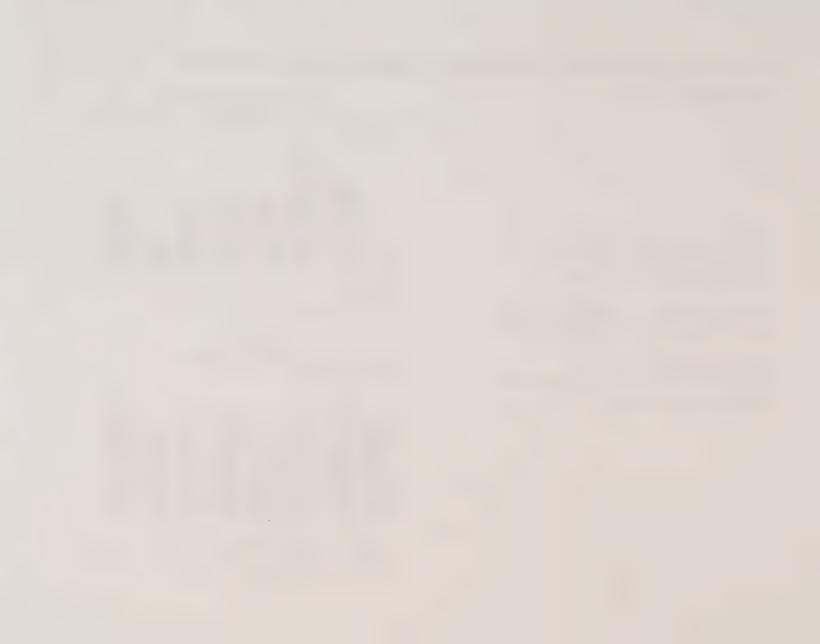
107.6
95.2
93.5
88.5
93.9
87.7

BC Alta Sask Man Ont Que Atlantic U.S.

\* Labour productivity for the total economy; based on GDP at market prices (per worker) to allow for comparison with U.S.; and Statistics Canada PPP.

Source: IC calculations based on Statistics Canada data

K-6

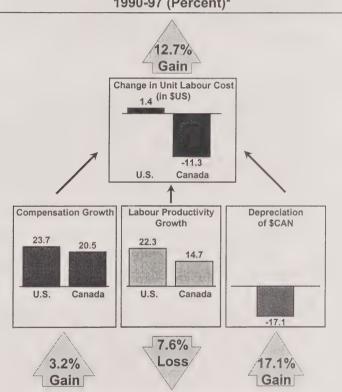


# Our weak productivity performance is also subtracting from our international competitiveness

The improvement in Canada's cost competitiveness vis-à-vis the U.S. in the 1990s has been mostly due to a depreciating Canadian dollar.

- Our manufacturing productivity grew only at about two-thirds the U.S. rate during the 1990s (i.e., 22.3% vs 14.7%).

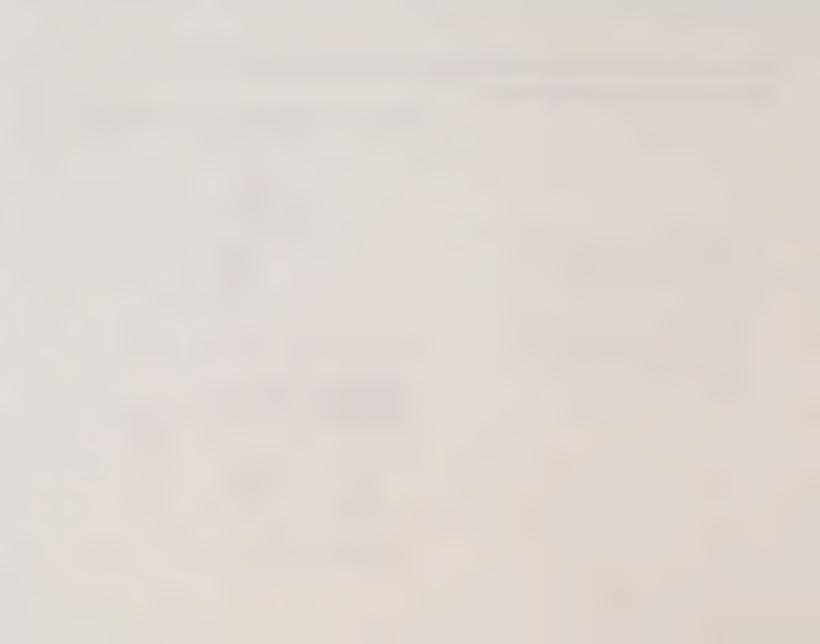
# Change in Competitiveness — Manufacturing 1990-97 (Percent)\*



<sup>\*</sup> Based on logarithmic decomposition, therefore growth rates may differ from published growth rates.

Source: US Bureau of Labour Statistics (April 1999).

K-7



# Concluding Messages: Productivity, sustainable competitiveness and standards of living go hand-in-hand

 Much analysis has been produced recently about Canada's productivity performance, with many methodologies and data used to examine the issue, and a variety of opinions on how to best interpret the growth rate data. Some confusion about what all these data mean is understandable.

There is a consensus, however, that a country's <u>level</u> of productivity is a fundamental determinant of its standard of living. Canada's <u>level</u> of productivity is significantly below that of the U.S., and this is the key determinant of the large standard-of-living gap between Canada and the U.S. — we should and can do better.

• If we wanted to achieve similar real income per capita levels as the U.S., Canadian productivity growth would need to be much faster than that of the U.S., and over a sustained period — growing roughly at the same rate as the U.S. is not good enough.

For example, assuming that U.S. labour productivity continues to grow by 1.0% per year, closing our standard-of-living gap would require that Canada's productivity growth average 3.3% per year over the next 10 years — three times as fast as the Canadian and U.S. average over the last 20 years.



#### For Further Information

We welcome your questions, comments and suggestions? You can reach us by ...

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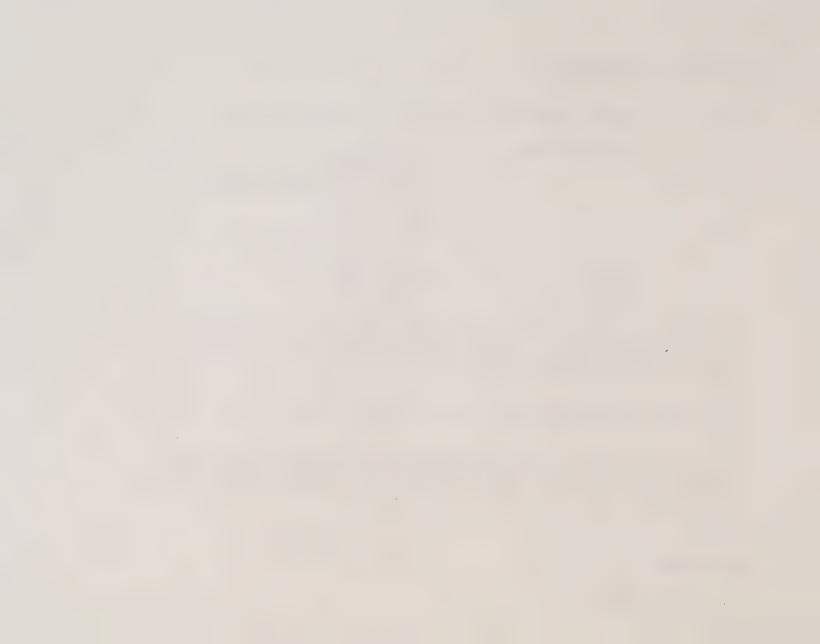
The Micro-Economic Monitor is prepared on a quarterly basis by the Micro-Economic Analysis Directorate of Industry Canada. The Monitor provides a guick and easy-to-read update on Canada's economic performance. It also provides topical in-depth reports on current economic issues from a micro-economic perspective.

The current analysis update was prepared by Dave Dupuis, Joseph Macaluso, and Karen Smith, under the direction of Shane Williamson.

Gary Sawchuk is the General Editor of the Special Features in the Micro-Economic Monitor. This quarter's feature was prepared by the Strategic Investment Analysis Directorate, in consultation with Serge Nadeau. Presentation assistance was provided by Caroline Farmer.

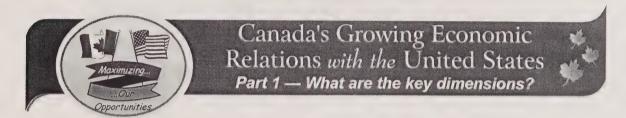
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K-9



# Micro-Economic Onitor

With the special report:



Second Quarter, 1999

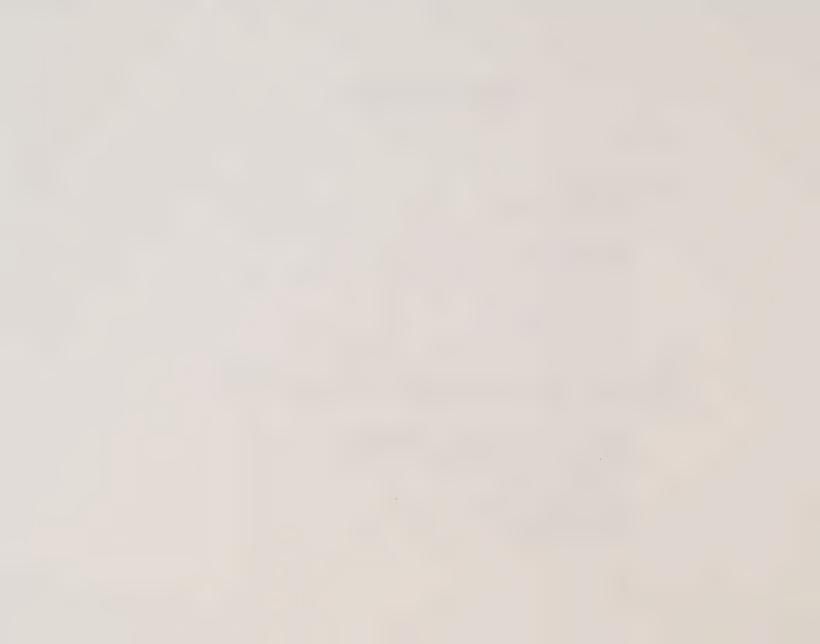
Micro-Economic Analysis Directorate, Industry & Science Policy Sector, Industry Canada.

This document is also available on the Internet at http://strategis.ic.gc.ca/sc\_ecnmy/mera/engdoc/04.html



# **Table of Contents**

Overview A
Domestic Scene
Real Economic Activity B
Income Side C
Price Movements
Labour Situation E
Financial Variables F
Fiscal Track G
Competitiveness H
International Accounts
Sectoral Overview
Occioral Overview
Special Feature:
•
Canada's Growing Economic Relations with the United State
Part 1 — What are the key dimensions?
Foreword K
How fast-growing is our trade with the U.S.? L
Are our U.Sbound exports changing in nature? M
Where do we export in the U.S.? N
Investment and R&D O
Other commercial links P
Movement of people Q
Concluding notes R



Overview



# Output growth slows in the second quarter of 1999...

The economy expanded by 3.3% (annual rate) in the second quarter, down from an average growth rate of 4.5% in the previous two periods.

- Growth was boosted by a computer-led surge in M&E investment, which posted its biggest quarterly gain in eight years. Businesses also added substantially to their stock of inventories in the second quarter.
- Housing continued to rebound strongly from a weak 1998. Investment in Non-residential Construction was also up slightly, with higher energy prices pointing to further gains in the second half of the year.

#### ...as consumer spending moderates and exports level off

Consumer spending slowed to a more sustainable pace in the second quarter after a big increase in the previous period. And, in a reversal from the first quarter, export growth stalled while demand for investment-related imports grew sharply. Still, trade prospects remain positive given continued strong growth in the U.S. and signs of a turnaround in Asian markets.

The overall outlook for the Canadian economy is fairly upbeat. Indeed, the current consensus forecast is for growth of 3.5% in 1999, considerably above projections of just over 2% growth early in the year.

This issue's special report kicks off a two-part study of Canada's strong and growing economic relations with the U.S. Part 1 provides a snapshot of the key economic linkages between the two countries -- notably trade, but also investment, people and other linkages. Part 2, which will appear in the next issue of the Monitor, will identify key challenges facing Canada and examine how we might better take advantage of economic opportunities in the U.S.

A-1

**Domestic Scene** 

Real Economic Activity



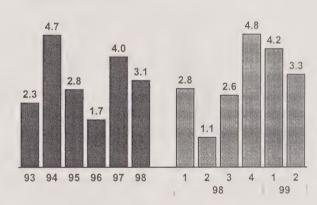
# Economic growth continues at a slower pace...

Real GDP rose 3.3% (annual rate) in the second quarter of 1999, slower than during the previous two quarters, but still at a very respectable pace.

- Sharply higher investment in M&E, business inventories and housing led the advance.
- Surging imports and slower growth in consumer spending and exports moderated growth in the second quarter.

#### Real GDP Growth

% Change, SAAR

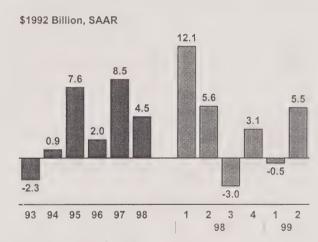


# ...boosted by a substantial buildup of inventories...

After drawing down inventories in the first quarter of 1999, businesses added \$5.5 billion to non-farm inventories in the second quarter.

- The resulting \$6.0 billion swing in inventory investment represents nearly 85% of the total increase in real GDP for the quarter.
- The inventory buildup was concentrated in the Manufacturing and Wholesaling sectors.

#### Non-farm Business Inventory Investment



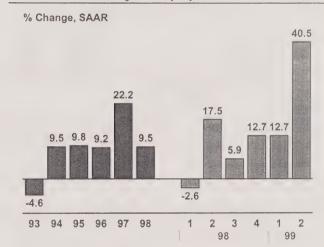
# ...a sharp rise in M&E investment...

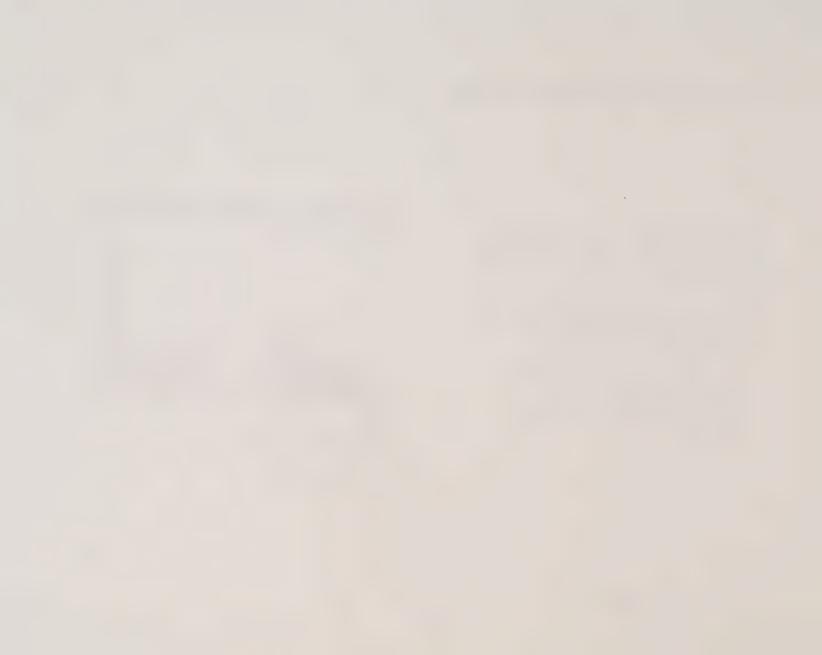
Business investment in M&E surged by 40.5% (annual rate) in the second quarter, the largest increase in eight years.

Although gains were widespread, computer purchases associated with Y2K compliance led investment growth.

 Purchases of telecommunications equipment and transportation equipment also posted strong advances.

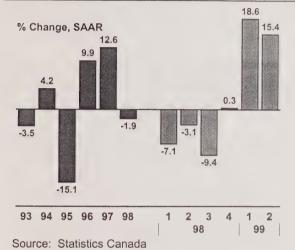
#### Real Machinery & Equipment Investment



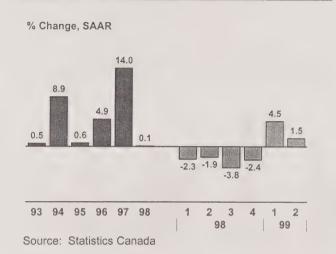


### ...and an ongoing rebound in housing



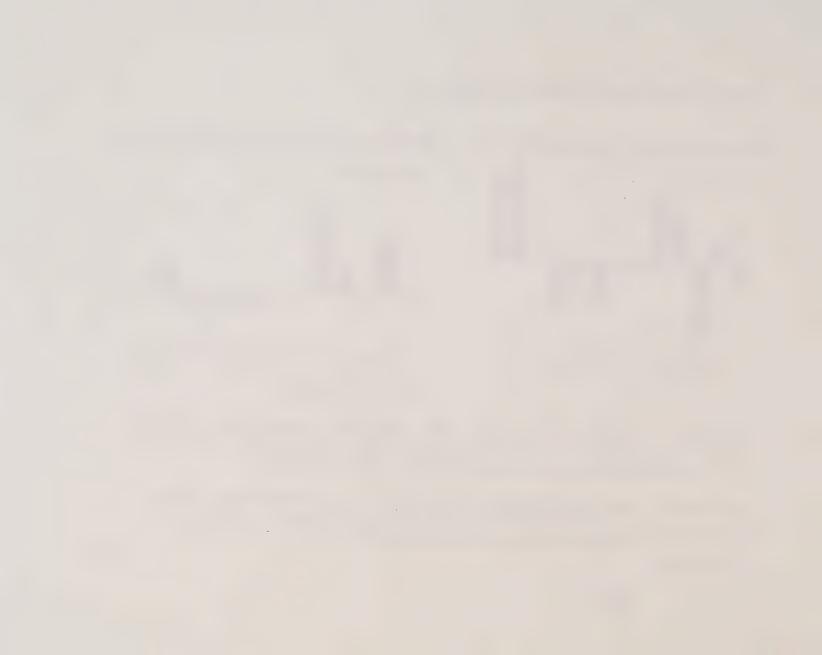


#### Real Non-residential Construction Growth



Investment in Housing rose 15.4% (annual rate) in the second quarter of 1999, continuing to rebound from an extended period of weakness in 1998. Sales of existing homes led this gain, but new housing construction and renovation activity were also up.

Higher building construction resulted in growth of 1.5% (annual rate) in Non-residential Construction, the second consecutive increase following five straight declines. Engineering construction was down in the second quarter due to reduced oil and gas drilling activity.



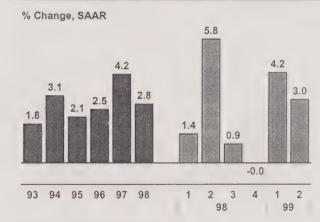
# Growth is moderated by a slowdown in consumer spending...

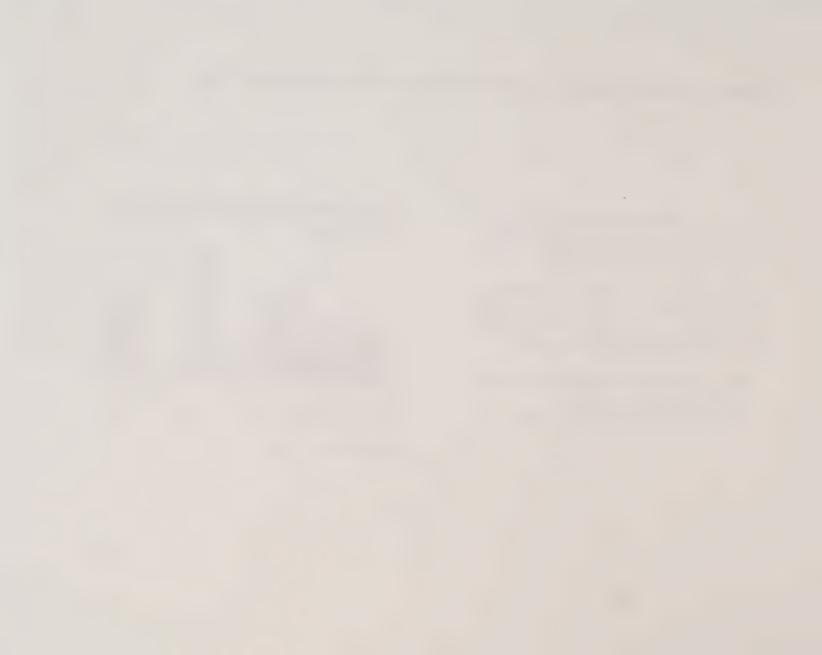
Consumer spending advanced 3.0% (annual rate) in the second quarter, down from 4.2% in the previous period.

Strong growth in spending on services (4.8% annualized) compensated for weaker spending on goods, which advanced only marginally after a strong first quarter.

 Purchases of goods slowed across all major categories – durables, semi-durables, and nondurables.

#### Real Consumer Expenditure Growth





# ...and a sharp decline in Canada's trade surplus

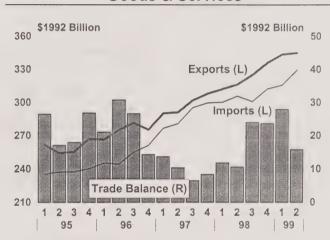
Growth in exports of goods and services slowed to 1.5% (annual rate) in the second quarter, the smallest advance in two years.

 A modest rise in the shipments of goods was partly offset by lower exports of services (due mainly to decreased foreign travel expenditures in Canada coinciding with the strengthening dollar).

In contrast to sluggish exports, imports rose sharply (18.2% annualized), fuelled by higher purchases of investment-related M&E and Automotive Products.

As exports failed to keep pace with imports, Canada's real trade surplus declined substantially in the second quarter.

# Real Exports and Imports of Goods & Services



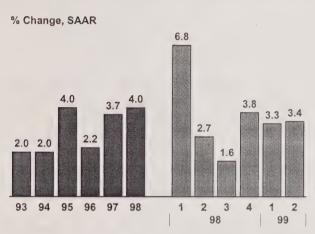
# **Domestic Scene**

Income Side



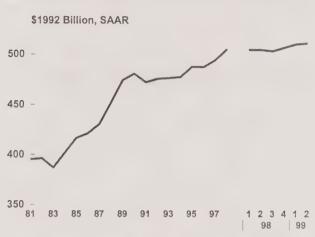
# Growth in personal income holds steady...

#### **Growth in Personal Income**



Source: Statistics Canada

#### Real Personal Disposable Income\*



\* Converted to real dollars using the chain price index for personal expenditure on goods and services.

Source: Statistics Canada and Industry Canada

C-1

Personal income rose 3.4% (annual rate) in the second quarter of 1999, growing at roughly the same solid pace established in the previous two quarters.

Disposable income increased at a slightly slower rate (+2.6%), as income taxes and contributions to social insurance schemes continue to rise faster than personal income.

After adjusting for inflation, personal disposable income is up only 1.3% on a year-over-year basis.

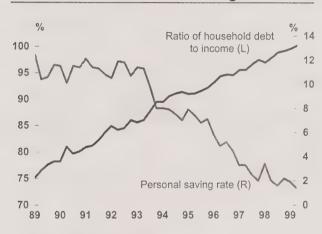
#### ...but household finances weaken

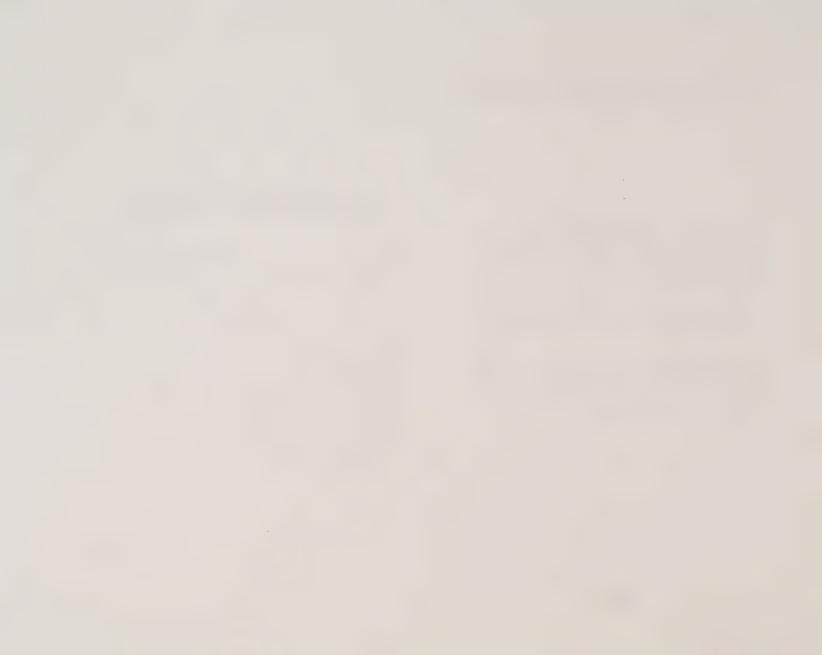
As growth in consumer spending outpaced gains in disposable income, the saving rate fell half a percentage point to 1.4% in the second quarter.

- This is the lowest saving rate on record (available data extend back to 1961).

Consumers also financed new purchases through mortgages and consumer credit, raising the household debt-to-income ratio to a record 100.2%.

#### Personal Debt and Savings Rate

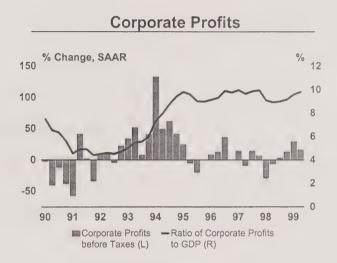




#### Profits continue to recover from losses in the first half of 1998

Continuing to rebound from sharp losses in the first half of 1998, corporate profits rose 16.5% (annual rate) in the second quarter of the year.

 As a percent of GDP, profits increased to 9.8%, nearly matching the recent peak set just prior to the collapse in commodity prices at the end of 1997.





**Price Movements** 



## Inflation climbs back to just under 2%...

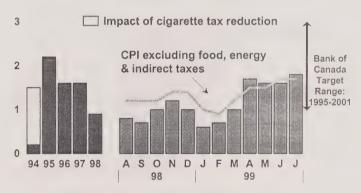
After hitting a four year low of 0.6% in January, inflation has increased slightly, remaining within a narrow band between 1.6% and 1.8% from April to July.

 These inflation rates are comparable to those prevailing in 1996 and 1997.

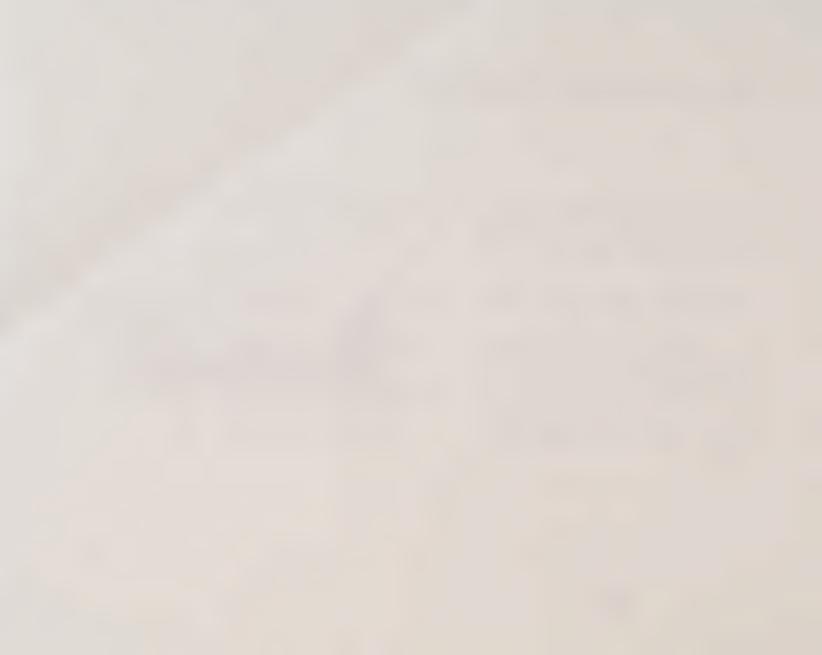
The "core" inflation rate – excluding the volatile food and energy components as well as the impact of indirect taxes – was 1.6% in July, within the bottom half of the 1-3% target range set jointly by the Bank of Canada and Department of Finance.

#### **Consumer Price Index**

Year-Over-Year % Change



Source: Statistics Canada & Bank of Canada



## ...led by higher prices for gasoline and new motor vehicles

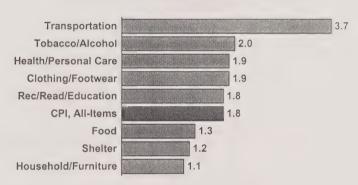
Increased Transportation costs – including price hikes for gasoline and new cars and trucks – accounted for just over one-third of the year-over-year rise in the general price level in July.

 Gasoline prices were up 9.6% compared to July 1998, the first year-over-year advance since October 1997.

Lower prices for computer equipment and telephone services continue to put downward pressure on annual inflation.

#### Components of CPI: July 1999

Year-Over-Year Price Change





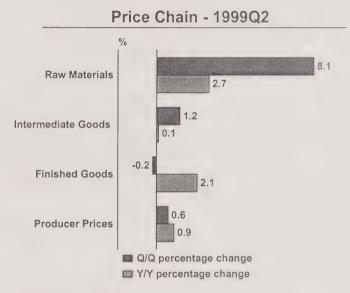
## Commodity prices strengthen considerably in the second quarter

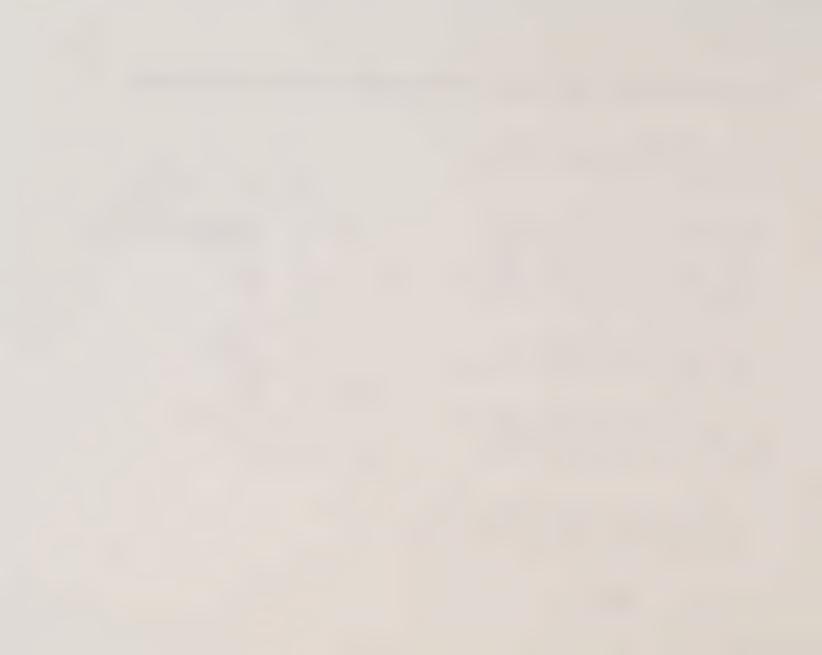
The price of raw materials rose 8.1% in the second quarter, and then increased a further 4.6% in July.

- Most of this strength stemmed from a sharp recovery in the price of crude oil, which was up 63% on a year-over-year basis in July. Cuts in production by OPEC countries and other producers have led to significantly higher prices.
- Prices for non-ferrous metals such as copper, zinc and aluminum also picked up in the quarter.

Industrial product prices – those received by producers at the factory gate – were 0.9% higher on an annual basis in the second quarter.

 In addition to higher prices for refined petroleum products, softwood lumber and pulp prices also gained strength.





Labour Situation



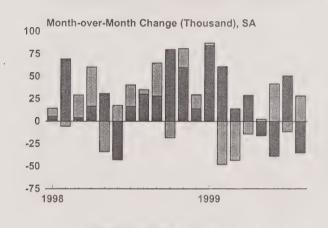
## Employment growth slows markedly...

Employment growth has slowed dramatically this year.

Over the first eight months of 1999, there has been a net gain of only 109,000 new jobs.

- Moreover, most of this increase can be traced to an exceptional gain of 87,000 jobs in January.
- Since then, the level of employment has been fairly flat, rising by only 21,000 over the entire February - August period.

#### **Employment Growth**



Full-Time Part-Time
Source: Statistics Canada



## ...as the private sector sheds jobs...

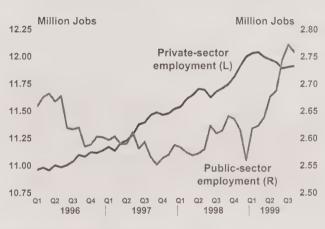
In sharp contrast to past years, the public sector has been the main source of new jobs in the economy so far this year.

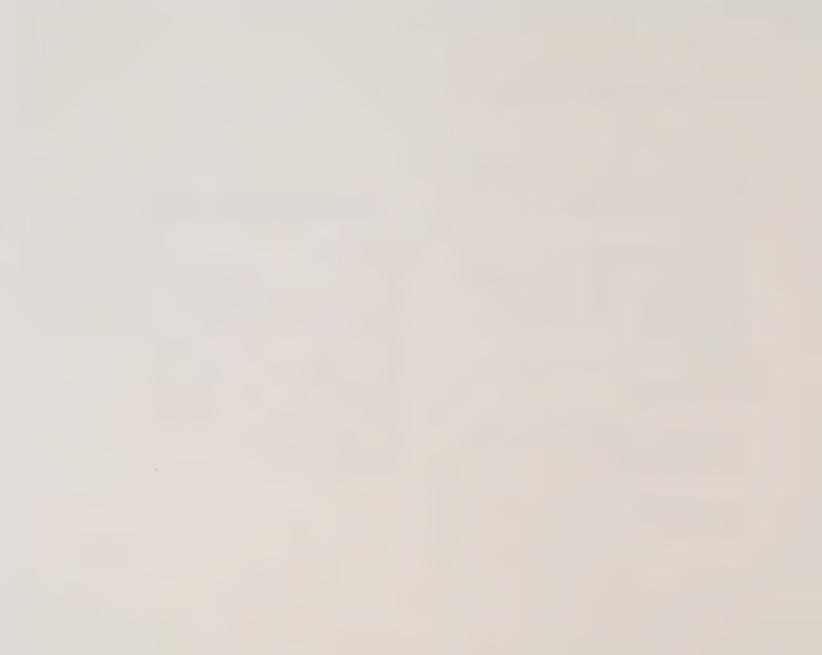
 Increases in the public-sector component of Educational Services and Health & Social Service industries have driven up public-sector employment 7.7% so far this year, for a net gain of 198,000 new jobs.

Private-sector employment is down on a year-to-date basis.

- The number of paid employees in the private-sector has fallen by 40,000 from January to August.
- The level of self-employment is also down (-49,000).

#### **Employment: Private vs. Public**





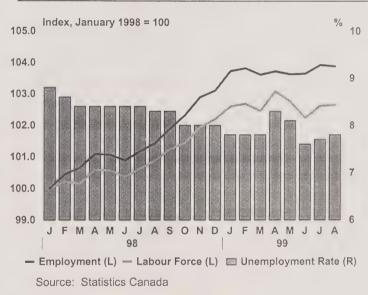
## ...but the unemployment rate holds steady

The national unemployment rate was 7.8% in August, the same as in January.

Over the course of the year, the unemployment rate has fluctuated with changes in the labour force, as employment has remained relatively stable.

- In April, the unemployment rate jumped up to 8.3% due to a major surge in the number of job seekers.
- Sharp drops in the labour force over the next two months lowered the unemployment rate to 7.6% in June, a nine-year low.
- A partial recovery in the labour force pushed the unemployment rate back up to 7.8% in August.

#### Employment, Labour Force and the Unemployment Rate





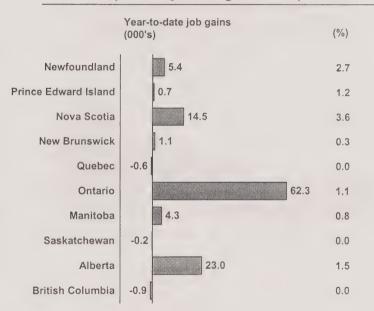
# Job gains this year have been concentrated in Ontario, Alberta and Atlantic Canada...

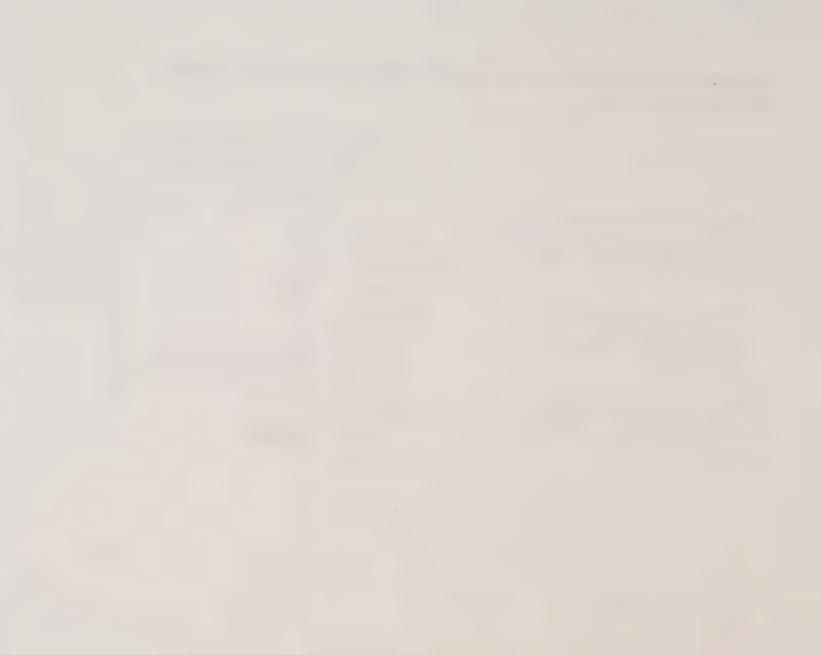
In terms of absolute numbers, Ontario and Alberta have accounted for most of the net job creation in the Canadian economy so far this year.

 However, in percentage terms employment growth has been strongest in Nova Scotia and Newfoundland.

Employment has been virtually unchanged on a year-to-date basis in New Brunswick, Quebec, Saskatchewan and British Columbia.

# Employment Growth by Province (January to August 1999)





## ...but significant regional differences in unemployment remain

Current unemployment rates vary from a low of 5.9% in Saskatchewan to a high of 16.5% in Newfoundland.

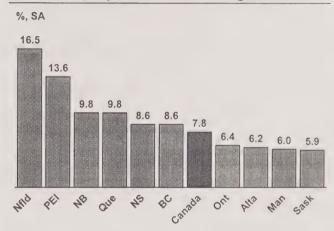
Compared to the beginning of the year, unemployment rates are higher in Manitoba (+0.1 percentage points), Alberta (+0.5 points) and British Columbia (+0.4 points).

 Job gains have been offset by a bigger jump in the labour force in Manitoba and Alberta. Employment has edged down in B.C., and the number of job seekers has increased.

Elsewhere, Newfoundland has enjoyed the biggest fall in its unemployment rate so far this year (-2.2 percentage points), with solid employment gains and no change in the labour force.

- The other Atlantic provinces have also registered substantial declines on a year-to-date basis.

#### **Unemployment Rates: August 1999**





Financial Variables

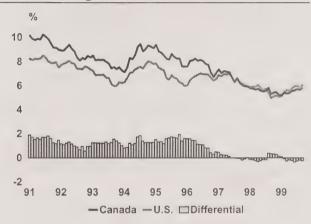
## Long-term rates are trending up...

Fears of rising inflation in the U.S. have pushed up bond yields on both sides of the border.

The long-term Canadian rate has increased by roughly 60 basis points since the beginning of the year.

As the bond market sell-off has been more pronounced in the U.S., Canadian long rates have been below comparable U.S. yields since February.

#### **Long-Term Interest Rates**



Last data point plotted: September 8, 1999

Source: Bank of Canada, Government long-term bond, last Wednesday in the month

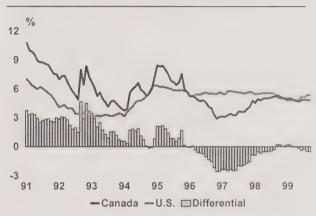
#### ...but short term rates in Canada remain stable

The Bank of Canada last cut its Bank Rate on May 4, bringing this trend-setting rate below the level prevailing a year ago when interest rates were boosted to support the Canadian dollar.

 Since early May, short term rates in Canada have been fairly steady, even in the face of the interest rate hikes in the U.S. in June and August.

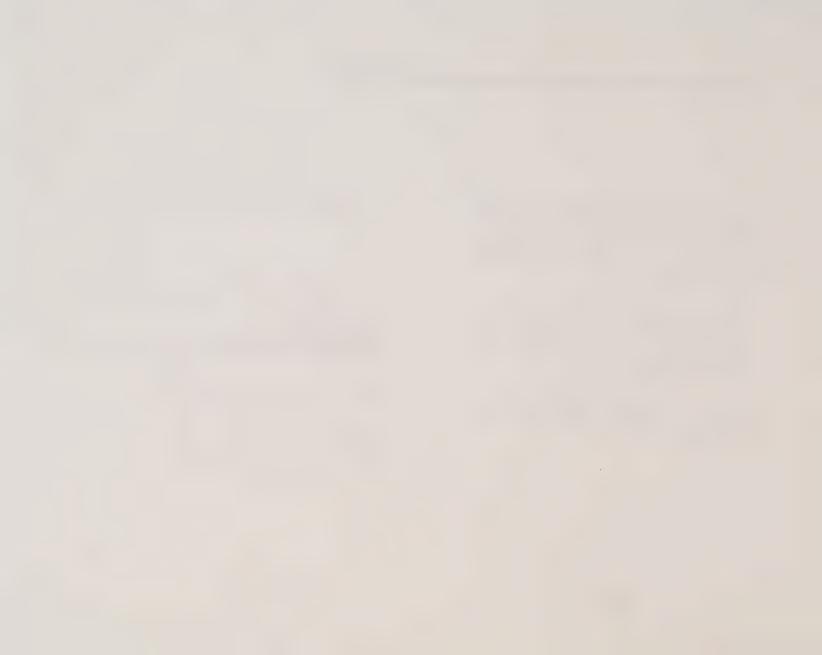
Canadian rates were roughly 50 basis points below comparable U.S. rates early in September.

#### **Short-Term Interest Rates**



Last data point plotted: September 8, 1999

Source: Bank of Canada, 90-day Commercial Paper, last Wednesday in the month



## The Canadian dollar gains strength from rising commodity prices...

Supported by rebounding commodity prices, the Canadian dollar has gradually recovered from its all-time low of US63.31¢ last August, trading above the US69¢ barrier early in May.

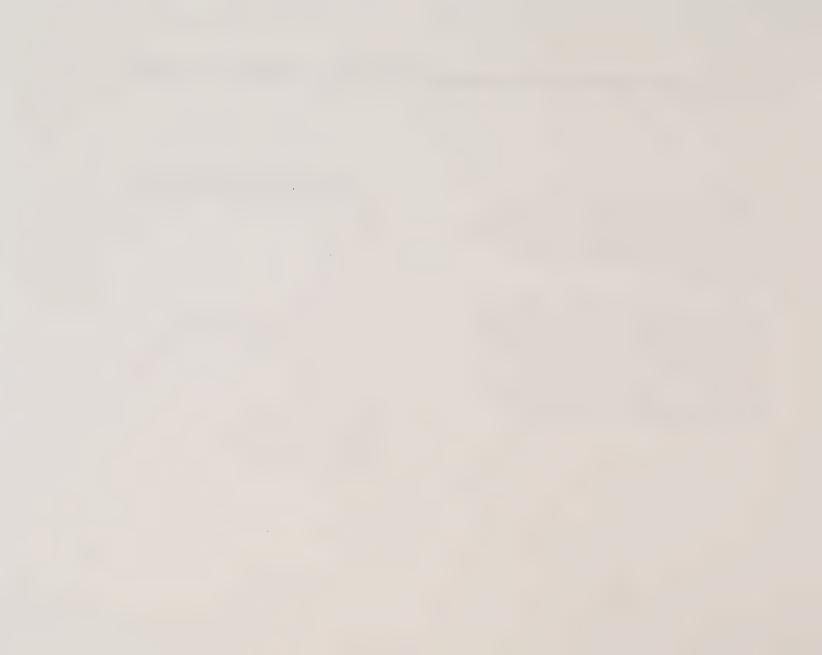
The Canadian dollar has been vulnerable to downward pressure from developments in the U.S. In particular, expectations of further interest rate hikes in the United States (which the Bank of Canada is not expected to match), have occasionally undermined support for the dollar.

#### Canada-U.S. Exchange Rate



Last data point plotted: September 10, 1999

Source: Bank of Canada



## ...and the stock market slowly recovers lost ground

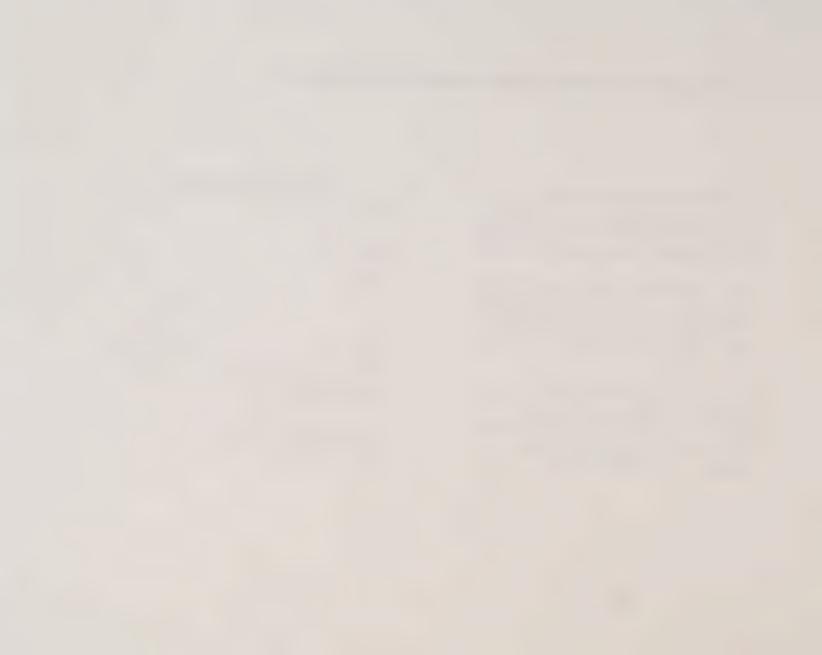
The TSE 300 index has recovered somewhat after falling more than 20% at the height of the Asian financial crisis last year, but remains below its previous peak.

 U.S. stocks have vastly outperformed Canadian securities. Compared to July 1998 (just prior to the Asian crisis), the S&P 500 index was up 20.6%, early in September.

Despite the general upward trend, stock markets have at times come under intense selling pressures when economic reports point to possible inflationary pressures in the United States.



Last data point plotted: September 10, 1999



Fiscal Track



## Federal finances on track for a balanced budget or better

Following a \$3.5 billion <u>surplus</u> in the 1997-98 fiscal year (the first in 28 years), the federal government posted a surplus of \$2.9 billion in 1998-99.

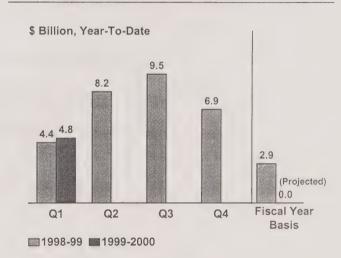
- This marks the first back-to-back surpluses since 1951-52.

A balanced budget or better is projected for the current 1999-2000 fiscal year.

 The federal government is on track to meet or better this objective. Over the first three months of the fiscal year, a \$4.8 billion surplus has been recorded, a slight improvement from the same period last year.

Other levels of government have also been successful in reducing budget deficits. Along with the federal government, six provinces and one territory plan to post balanced budgets or surpluses in the current 1999-2000 fiscal year.

#### Federal Budgetary Balance



Source: Department of Finance

Competitiveness



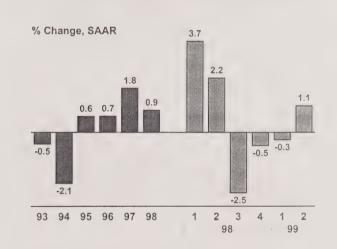
## Though unit labour costs remain subdued...

Canadian firms have been quite successful in holding unit labour costs down.

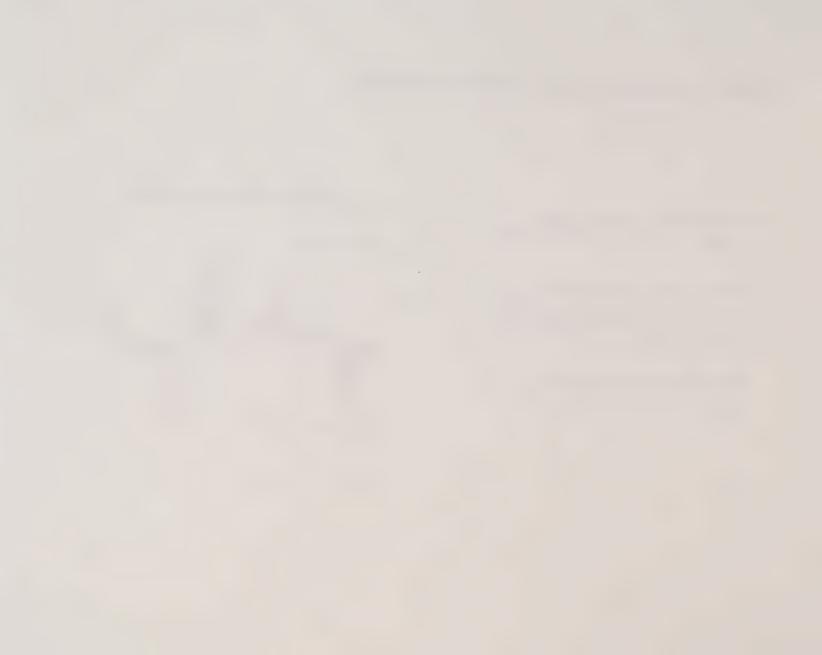
Unit labour costs rose a modest 1.1% (annual rate) in the second quarter of 1999, only partly offsetting declines in the previous three quarters.

 The total wage bill increased by 4.4%, exceeding growth of 3.3% in output.

#### **Growth in Unit Labour Costs**



Source: Industry Canada calculations



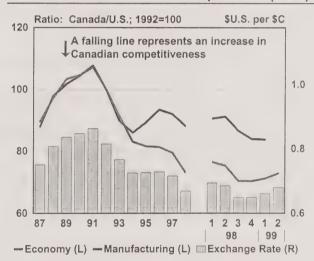
## ...a stronger dollar cuts into Canada's competitive position

After improving dramatically in 1998 due to a sharp drop in the value of our dollar, Canada's competitive position has weakened in the first half of 1999.

At the economy-wide level, and on a common currency basis, Canadian unit labour costs rose 1.2% relative to those in the U.S. in the first quarter, and 2.4% in the second quarter.

- The strengthening Canadian dollar has led to this decline in cost competitiveness.
- Apart from the exchange rate, Canadian firms have been more successful in controlling costs, with unit labour costs rising at a slower pace than in the U.S. so far this year.

#### **Unit Labour Cost Comparison (\$US)**

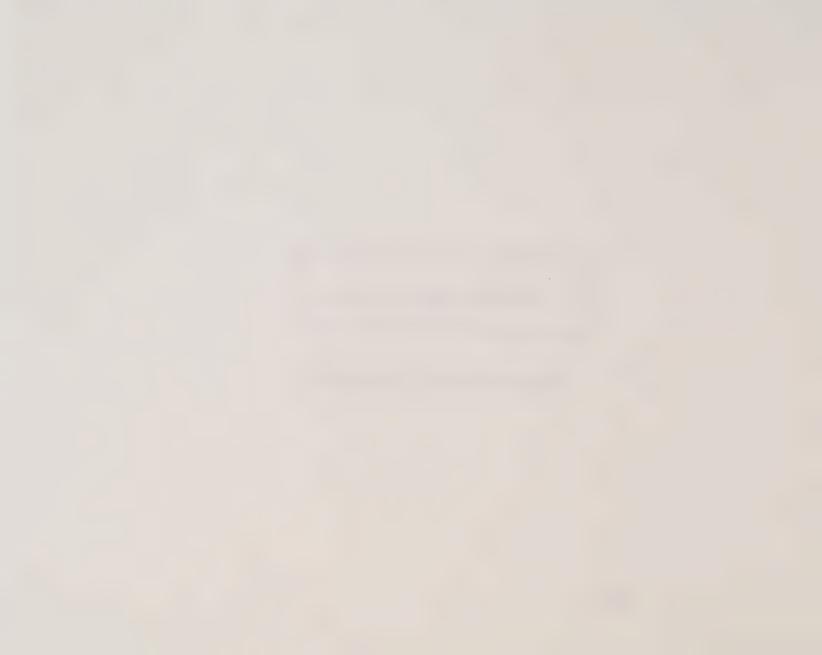


Note: Quarterly manufacturing ULC for 1999Q2 are not yet available. Source: Industry Canada estimates based on data from the U.S. Bureau of Labor Statistics & Statistics Canada



## **Domestic Scene**

International Accounts



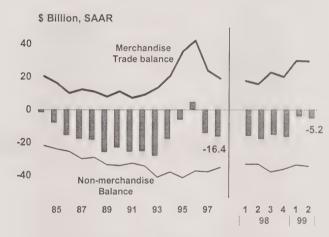
## The current account deficit widens slightly in the second quarter...

Canada's current account deficit rose slightly to \$5.2 billion (annual rate) in the second quarter of 1999.

 Still, the current account deficit has averaged \$4.6 billion (annual rate) in the first half of the year, a significant improvement from the \$16.4 billion deficit recorded in 1998.

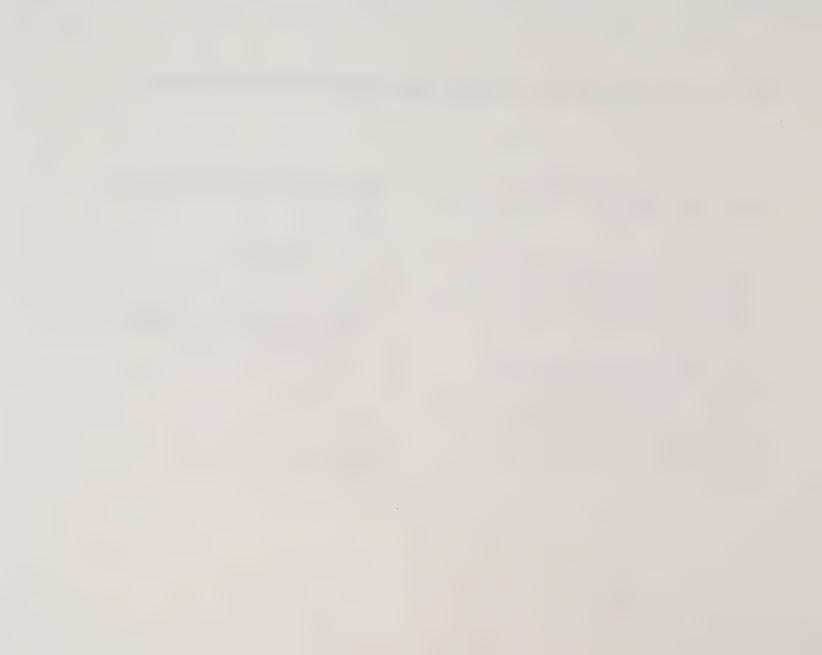
On the capital account, Canadian assets abroad increased by \$5.8 billion. International liabilities fell \$2.7 billion, as a near-record increase in foreign direct investment was more than offset by a sharp reduction in foreign holdings of bank deposits.

#### **Current Account & Trade Balances**



The merchandise trade balance represents net exports of goods.

The non-merchandise trade balance represents net exports of services plus net receipts of investment income and transfers.



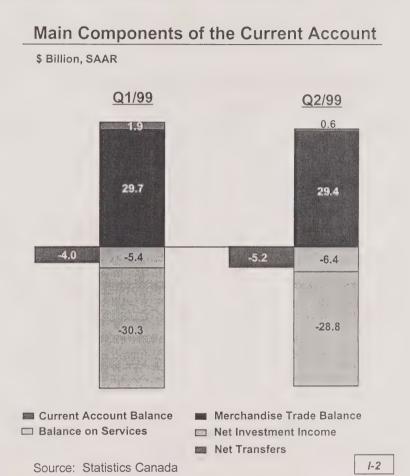
## ...due to a higher deficit on services and lower net transfers

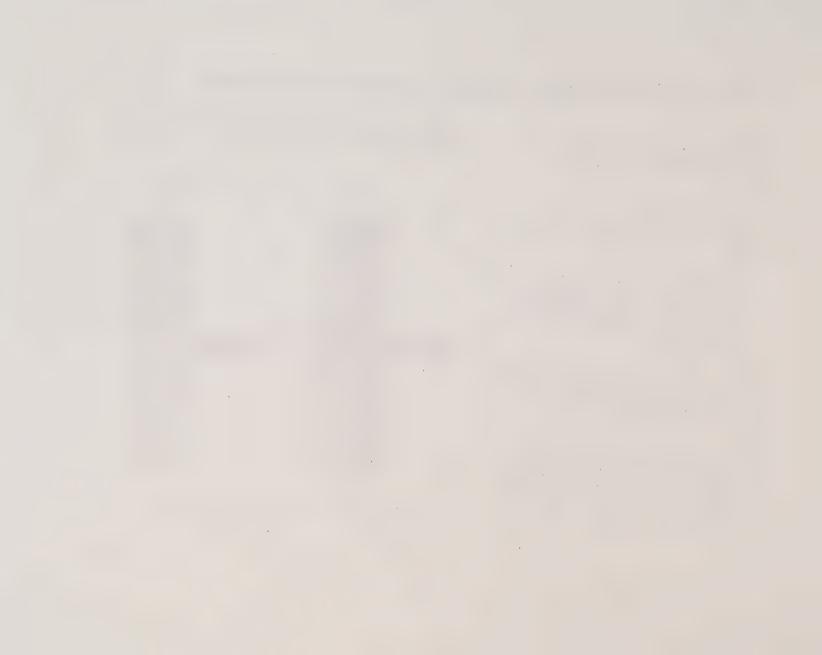
Canada's overall trade position weakened slightly in the second quarter.

- The merchandise trade surplus edged down to \$29.4 billion (annual rate).
- The deficit on trade in services widened to \$6.4 billion, reflecting higher deficits on travel and transportation.

A reduced surplus on current transfers also contributed to the increased current account deficit.

Declines in both portfolio and direct investment deficits lowered the deficit on investment income, partly offsetting the impact of lower overall surpluses for trade and net transfers.





## Exports to the U.S. are up strongly this year...

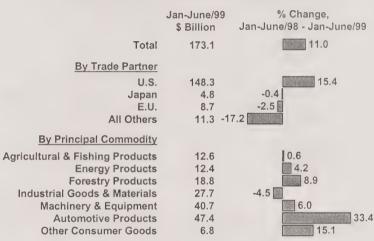
Merchandise exports increased by 11% in the first six months of 1999, compared to the same period a year ago.

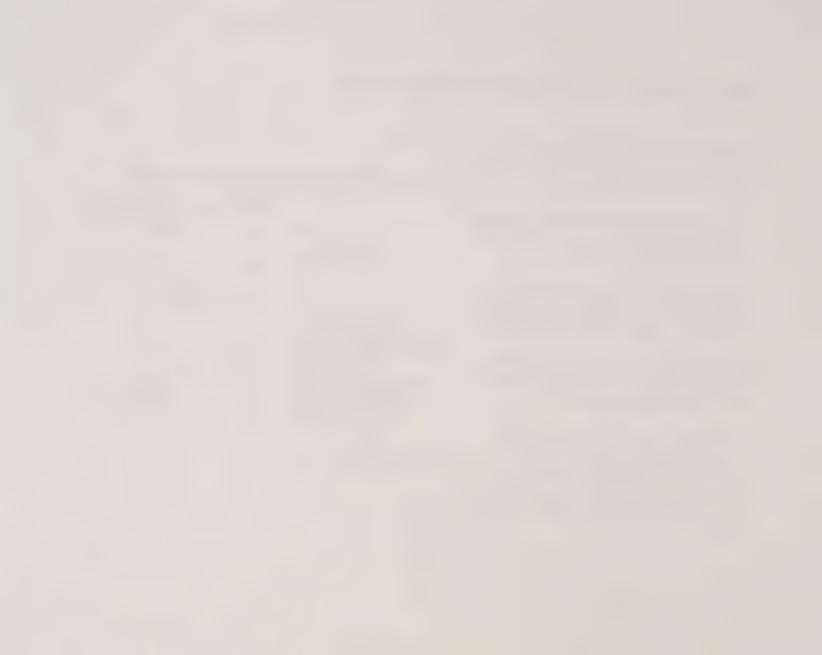
- This increase is due entirely to strong demand from the U.S., as sales to the rest of the world are down.
- Though down on a year-over-year basis, exports to Japan have shown signs of a rebound in recent months.

By commodity, exports of Automotive Products and Other Consumer Goods have registered strong gains.

 Although resource-based exports have been weak (except Forestry Products), Industrial Goods & Materials is the only major group posting a decline in the first half of the year.

## Merchandise Exports, Year-to-date





## ...outpacing the rise in imports

Merchandise imports from January to June are up 7.2% compared to a year ago.

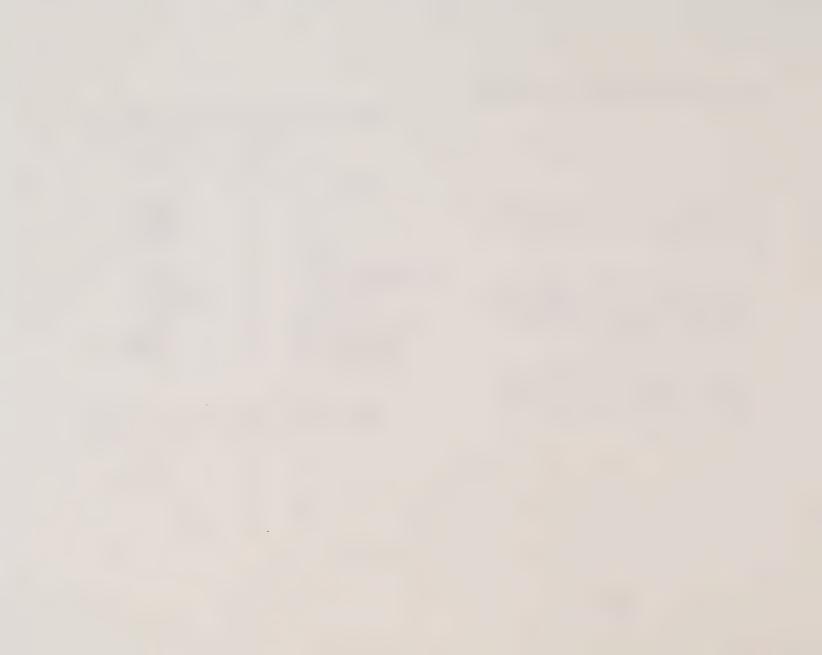
- While export growth has been concentrated in the U.S. market, the increase in imports is due to higher shipments from all regions.
- Given these trends, Canada's surplus with the U.S. has increased this year, while deficits elsewhere have widened.

#### Merchandise Imports, Year-to-date

	Jan-June/99 \$ Billion	% Change, Jan-June/98 - Jan-June/99
Total	158.3	7.2
By Trade Partner		
U.S.	121.7	7.4
Japan	5.1	4.3
Ė.U.	13.4	6.8
All Others	18.2	7.2
By Principal Commodity		
Agricultural & Fishing Products	8.8	4.2
Energy Products	4.2	-7.4
Forestry Products	1.3	8.7
Industrial Goods & Materials	30.1	1.7
Machinery & Equipment	52.8	8.1
Automotive Products	36.9	14.0
Other Consumer Goods	18.1	9.5

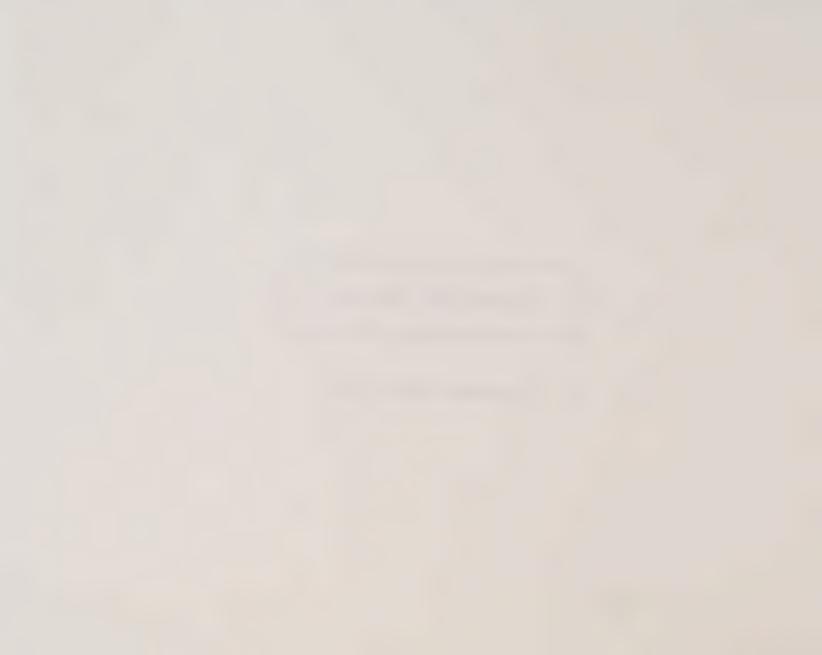
#### Balance by Trade Partner, Year-to-date

	Jan-June/99 \$ Billion	Change (\$Billion) Jan-June/98 - Jan-June/99
Total	14.8	6.6
U.S. Japan E.U. All Others	26.6 -0.3 -4.7 -6.9	-0.2 -1.1 -3.6



## **Domestic Scene**

Sectoral Overview



## Output expands in most sectors in the second quarter ...

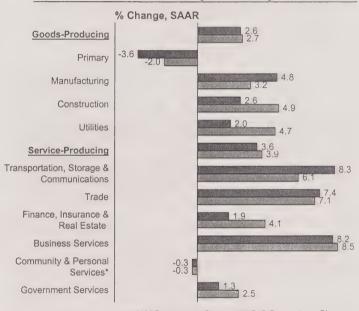
Output in the Goods-producing industries rose 2.7% (annual rate) in the second quarter of 1999.

- Manufacturing was boosted by strong demand for investment-related materials and export sales. Construction benefitted from increased residential and non-residential building activity.
- Although the Mining sector posted its fifth straight quarterly decline, losses have been more modest so far this year.
   Firmer commodity prices may help spur future production.

Activity in the Service sector rose 3.9% (annual rate) in the second quarter.

 In keeping with recent trends, gains were led by Communications (notably telecommunication services), Wholesale Trade (particularly for computer wholesalers) and Business Services.

#### Real GDP Growth by Industry: 1999Q2



■Y/Y Percentage Change ■Q/Q Percentage Change

Source: Statistics Canada

\*Education and Health & Social Services



## ...driving up capacity utilization rates...

Non-farm Goods-producing industries raised their rate of capacity utilization to 83.8% in the second quarter of 1999.

 Sharply-higher production of investment-related goods and strong demand for housing led the overall increase in capacity use.

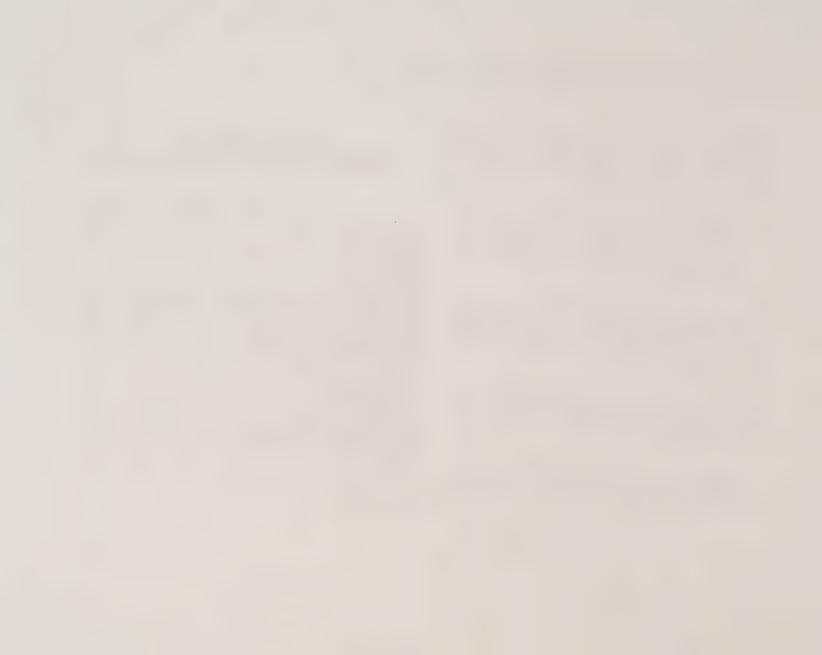
Capacity utilization in Manufacturing rose by 0.7 percentage points to 86.2% in the second quarter, slightly above the recent peak set in the first quarter of 1995.

Outside of Manufacturing, housing-related activity spurred an increase in capacity use in the Construction industry.

- A sharp drop in mining services contributed to lower capacity utilization in the Mining sector.

# Capacity Utilization: Non-farm Goods-producing Industries

	Level (%) 1999Q2	Change Q/Q	(% points) Y/Y	10-year Average
Total Non-Farm Goods-Producing	83.8	0.5	1.0	81.5
Logging & Forestry	82.3	-2.0	3.9	82.9
Mining & Quarrying	70.9	-6.5	-10.9	84.1
Crude Petroleum & Natural Gas	72.6	2.0	-4.6	82.2
Manufacturing	86.2	0.7	2.4	80.5
Durable Goods Manufacturing	87.7	1.3	4.4	79.3
Primary Metals	89.7	-0.7	-0.2	87.6
Fabricated Metals	82.5	0.3	0.4	76.9
Transportation Equipment	90.8	0.2	9.8	79.5
Electrical & Electronic Products	94.6	5.9	9.9 .	78.0
Non-Durable Goods Manufacturing	84.2	-0.2	-0.2	81.9
Food Products	83	0.2	1.1	80.0
Paper & Allied Products	89.3	-1.0	1.4	88.5
Printing & Publishing	81.5	-1.0	-1.4	79.6
Chemical & Chemical Products	80.1	-0.2	-4.9	84.1
Construction	85.8	1.2	2.4	83.1
Electric Power & Gas		0.8	0.7	82.4
Energy	78.8	1.3	-1.7	82.6
Total Excluding Energy	85	0.2	1.6	81.3



## ...and prompting firms to revise investment plans upward

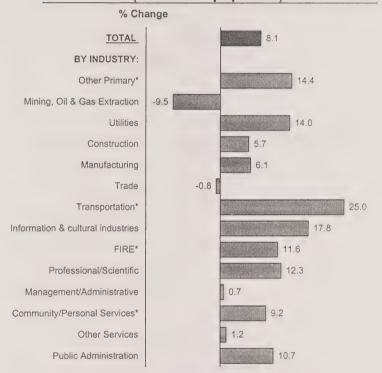
According to July's survey of private and public investment intentions, investment in Plant & Equipment is expected to increase 8.1% in 1999.

 This represents a substantial upward revision to investment plans from January, when an increase of only 0.8% was anticipated.

Higher investment in the Transportation & Warehousing industry should lead the overall gain in 1999, spurred by increased spending on new and existing pipeline projects.

The July survey pointed to a 9.5% fall in investment in the Mining sector, including a 6.1% drop for the Oil & Gas industry. The recent firming in crude oil prices will likely boost future spending plans in this sector.

# 1999 Investment Intentions by Industry (Plant & Equipment)



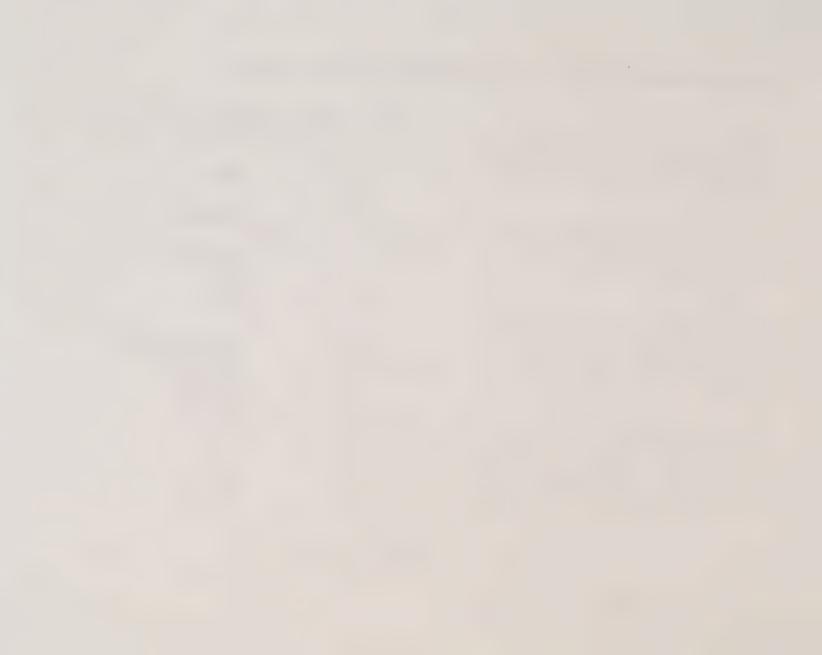
Source: Statistics Canada Survey of public and private investment intentions

FIRE: Finance, Insurance, Real Estate & Leasing;

Community/Personal Services: Education and Health & Social Services.

J-3

<sup>\*</sup>Other Primary: Agriculture, Forestry, Fishing & Hunting; Transportation includes warehousing; FIRE: Finance. Insurance. Real Estate & Leasing:



## Manufacturing is the main source of new jobs so far this year...

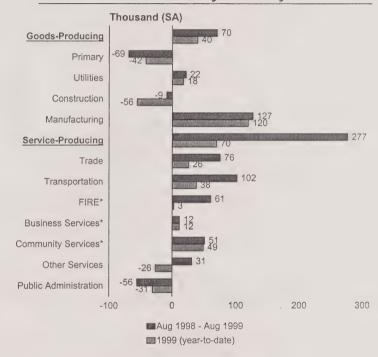
Employment growth has been weak across most industries this year. Within the Goods sector, 40,000 net new jobs (+1.1%) have been created in the first eight months of 1999.

- Despite the loss of 19,000 jobs in August, employment in Manufacturing has surged by 120,000 so far this year.
- However, the Construction and Primary industries have posted job losses.

Employment in the Services-producing industries increased by 70,000 (+0.6%) from January to August.

 Job losses in Professional, Scientific & Technical Services and Public Administration have partly offset gains in Education and Management & Administrative Services.

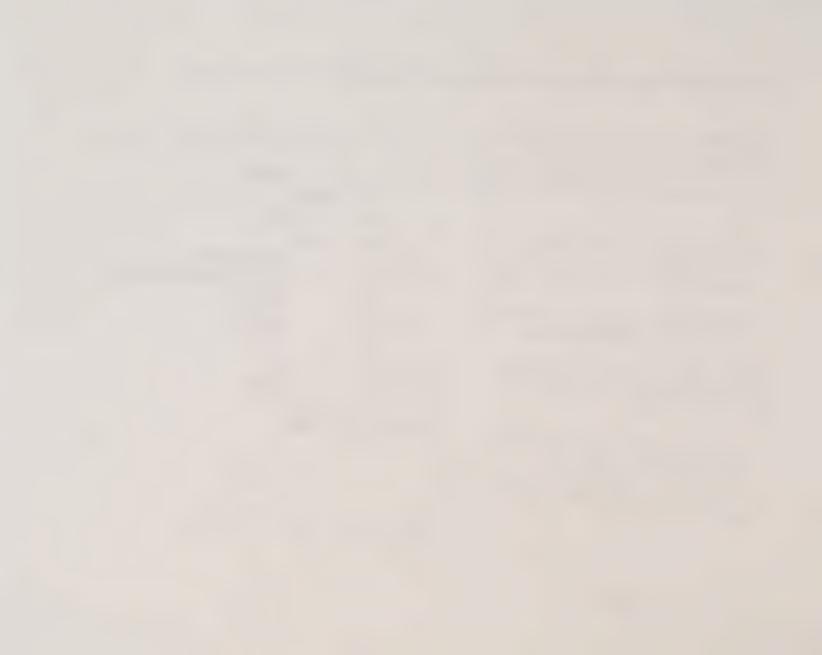
#### Job Growth by Industry



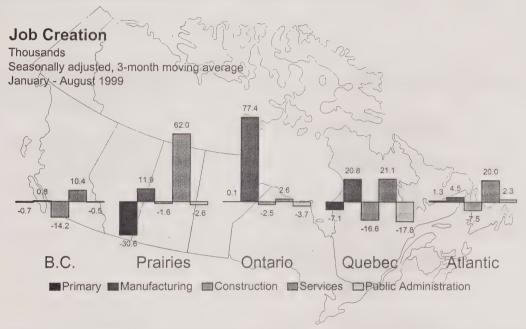
#### Source: Statistics Canada

\*FIRE: Finance, Insurance, Real Estate and Leasing
Business Services: Management, Administrative, Professional, Scientific & Technical Services
Community Services: Educational Services, Health & Social Assistance.

J-4



## ...with particularly large gains in Central Canada



The Service sector has accounted for most of the net job gains in Atlantic Canada and the West, offsetting weakness in the Construction and Primary industries.

Manufacturing has accounted for most of the net job creation in Ontario, with employment flat across all other major groups. In Quebec, Services and Manufacturing both contributed to employment growth, but these gains have been matched by losses elsewhere.

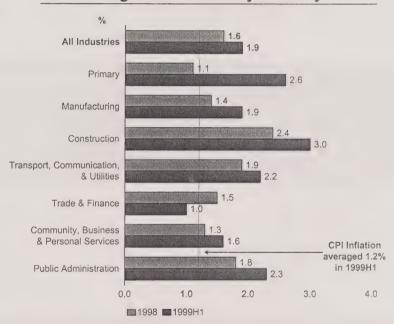
## Wage settlements pick up, but remain modest

Major wage settlements averaged 1.9% overall in the first six months of 1999, up from the 1.6% in 1998.

- On average, the largest settlements so far this year have been in the Construction (3.0%) and Primary industries (2.6%).
- Wage gains have been comparatively modest in Trade & Finance (1.0%).
   This is the only major industry group for which average settlements are down compared to last year, and where adjustments have lagged behind inflation.

Though private sector wage settlements (2.3%) continue to outpace those in the public sector (1.8%), this gap has narrowed significantly since 1996.

#### Wage Settlements by Industry



Effective average annual adjustments in base wage rates from major collective bargaining agreements. 1999 data cover agreements reached over the January to June period.

Source: Human Resources Development Canada





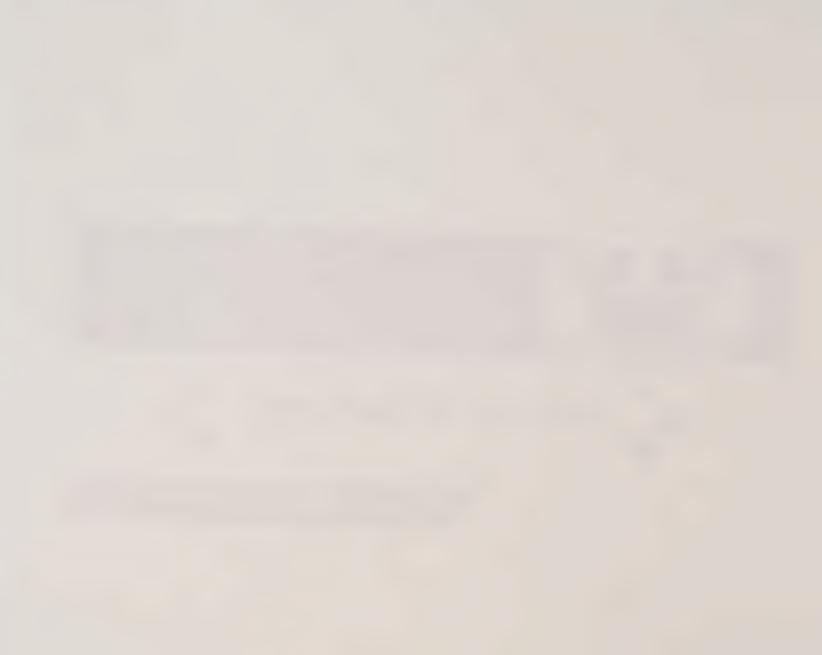
# Canada's Growing Economic Relations with the United States



Maximizing Our Opportunities



Part 1 — What are the key dimensions?





This two-part study provides an illustrative overview of Canada's strong and increasing economic relations with the U.S. — our neighbour and the world's most dynamic economy. These closer economic relations provide opportunities that can impact Canada's future growth and prosperity. Especially at a time of rapid globalization, the information revolution and the transition by all countries towards more knowledge-based activities, it is key that Canada take advantage of opportunities that promote Canada as an innovative and knowledge-based economy.

In this issue of the Micro-Economic Monitor we provide Part 1 — a snapshot of Canada's growing economic relations with the U.S., highlighting their many dimensions and key trends. It examines their increasing strength, and pays particular attention to the changing nature of our exports to the U.S.

Part 2 will be featured in the next issue of the Micro-Economic Monitor, and will detail the economic benefits of our growing economic relations with the U.S., exploring how we might better take advantage of economic opportunities in the U.S. It will also identify key challenges in pursuit of these opportunities.

As we approach the 21st century, our increasing economic relations with the U.S. are pivotal! Not only to better take advantage of attractive cross-border opportunities, but to be in better position to exploit new and emerging global opportunities — involving more value-added and knowledge-intensive activities that will be critically-important to Canada's future prosperity.

In making the transition to a more knowledge-based economy, we are moving from a world where natural resources provided important comparative advantages, to where innovation is now key.



# How fast-growing is our trade with the U.S.?

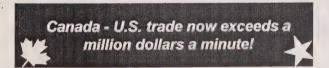


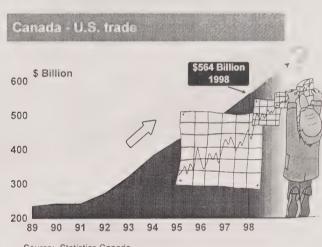


## Our trade with the U.S. has much more than doubled...

Between 1989 and 1998, our total trade with the U.S. (exports plus imports) rose a spectacular 140%.

From \$235 billion in 1989, it has soared to \$564 billion in 1998.



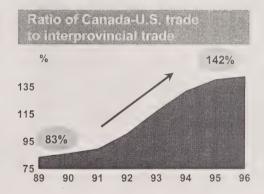




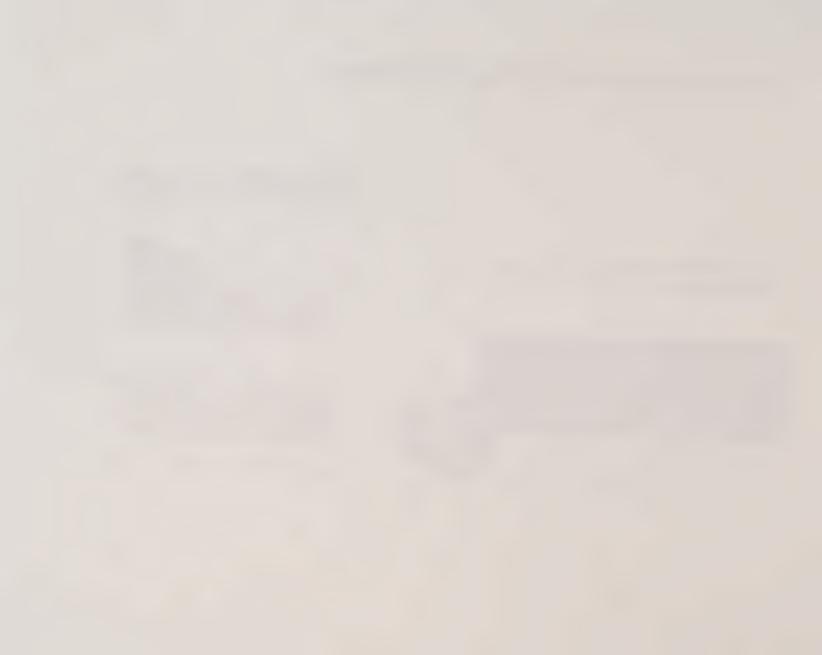
#### ...far outpacing growth in interprovincial trade...

Canada's trade with the U.S. is growing much faster than interprovincial trade.

Due South — In 1989, our North-South trade with the U.S. was substantially less than our interprovincial trade, but now there is nearly one and a half times as much going to the U.S.



* * * * * * * * * * * * * * * * * * * *	1989	1996
The state of the s	in \$ 1	Billion
U.S. trade	\$235	\$456
Interprovincial trade	\$282	\$320



#### ...and our trade with all other G7 countries

While our trade with other countries has also increased, it has not risen nearly as fast as with the U.S.

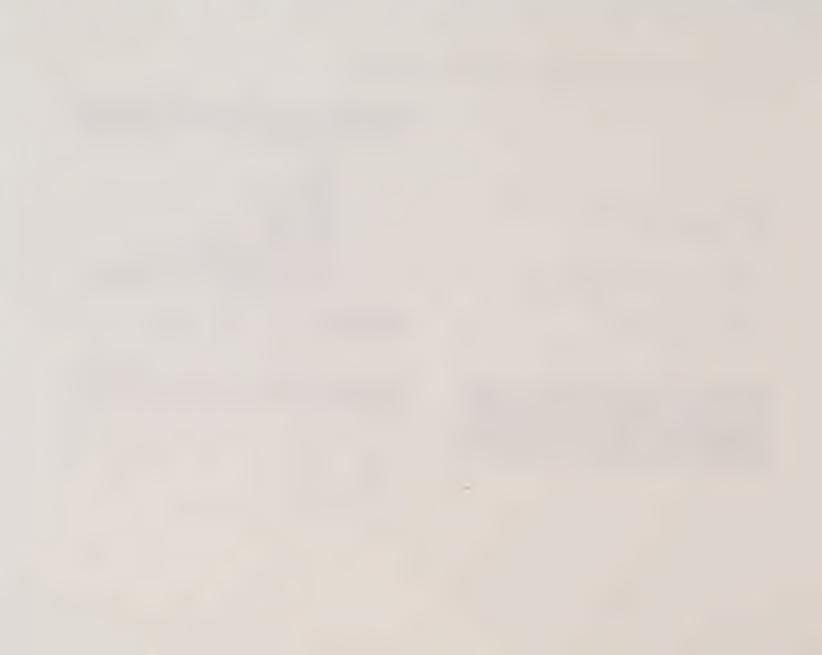
For the U.S., the story is the same! American trade with Canada has outstripped U.S. trade with any other major industrial country.

The U.S. is by far our largest trade partner. But we are also the U.S.'s largest partner. We tend to forget this.





Source: Industry Canada compilations based on data from Statistics Canada and U.S. Dept. of Commerce



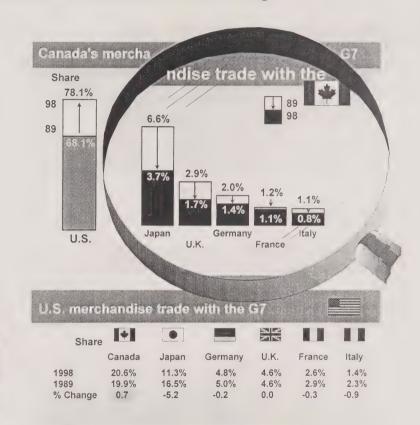
## Indeed, our trade shares with other G7 countries are falling

Between 1989 and 1998, the share of Canada's trade with the U.S. increased by 10 percentage points, to reach almost 80% of our trade.

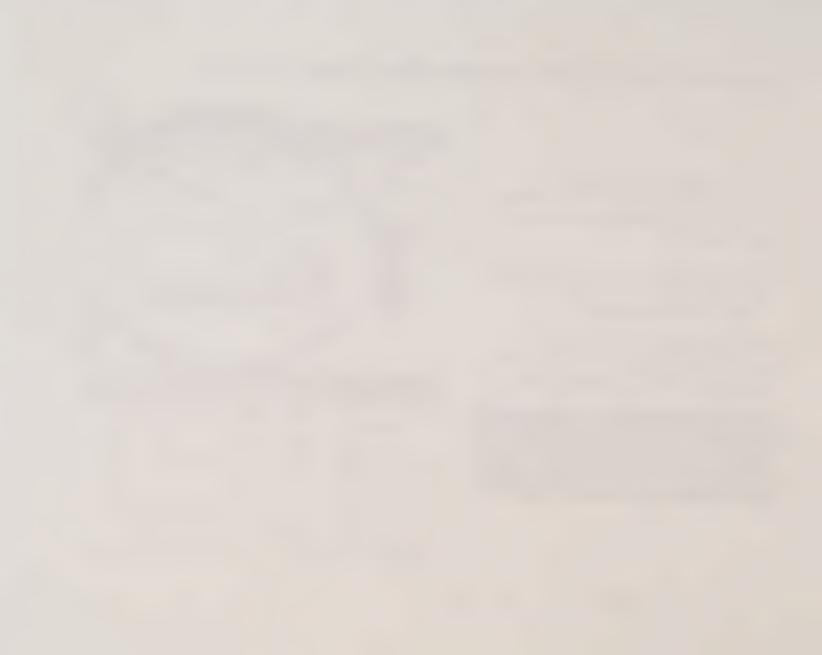
- That is, we trade more than <u>four-times</u> as much with the U.S. than with all other countries combined!

And only Canada, among the major industrial countries, saw its share of U.S. trade go up between 1989 and 1998.

Canada's trade shares with many other major countries have declined. Our second-largest trading partner, Japan, comprises less than 4% of our total trade.



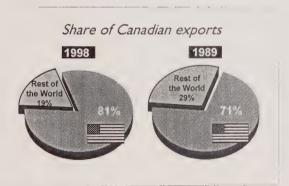
Source: Industry Canada compilations based on data from Statistics Canada and U.S. Dept. of Commerce. Trade data to the U.S. may reflect some export trans-shipments to other countries. Evidence suggests that the significance of this problem has not changed over time and trends should be unaffected However, this phenomena should continue to be further researched.

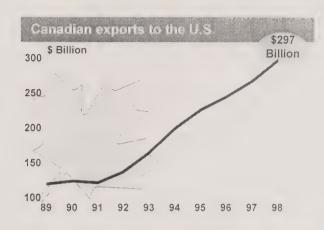


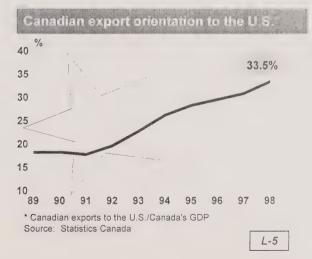
#### Our exports to the U.S. are growing strong...

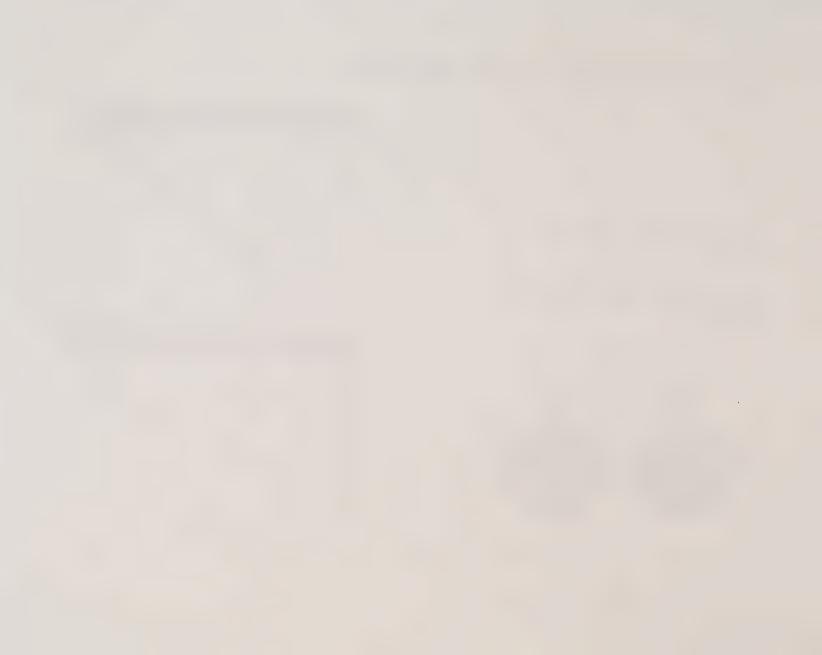
Today, \$297 billion or 81% of all Canadian exports go to the U.S.

This accounts for over 33.5% of our GDP, a significant rise from only a few years ago.





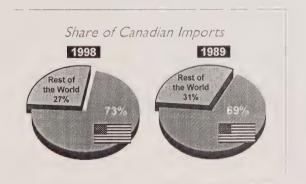


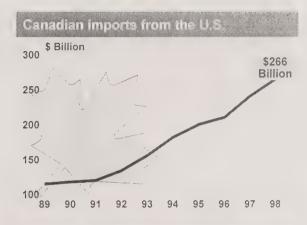


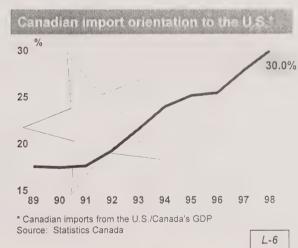
#### ...as are Canada's imports from the U.S. ...

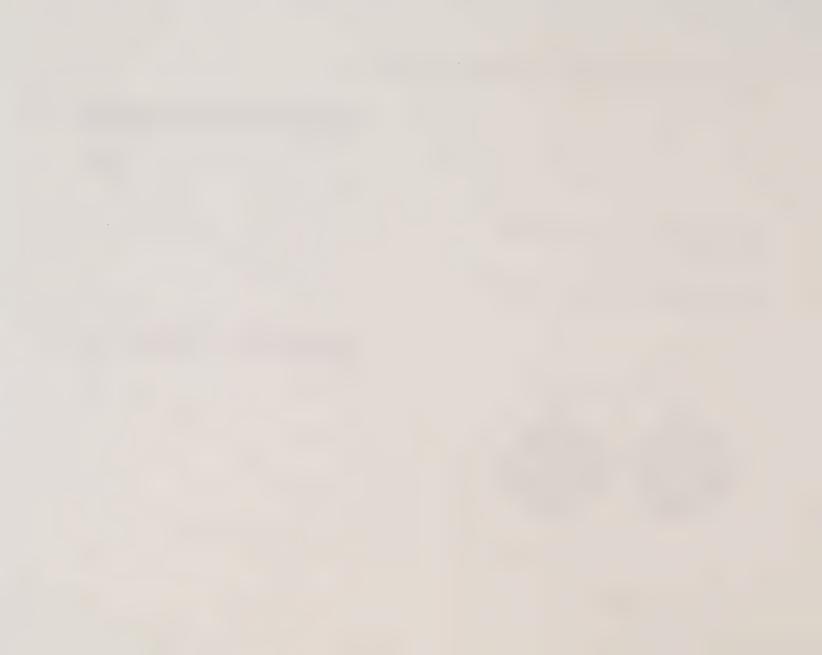
Similarly, 73% of all Canadian imports now come from the U.S.

These imports from the U.S. equal about 30% of Canada's total GDP.





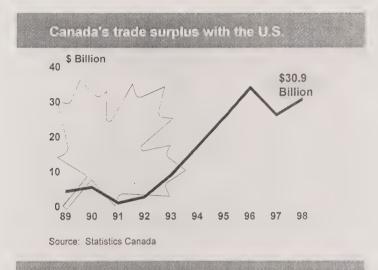




### ...contributing to a growing trade surplus

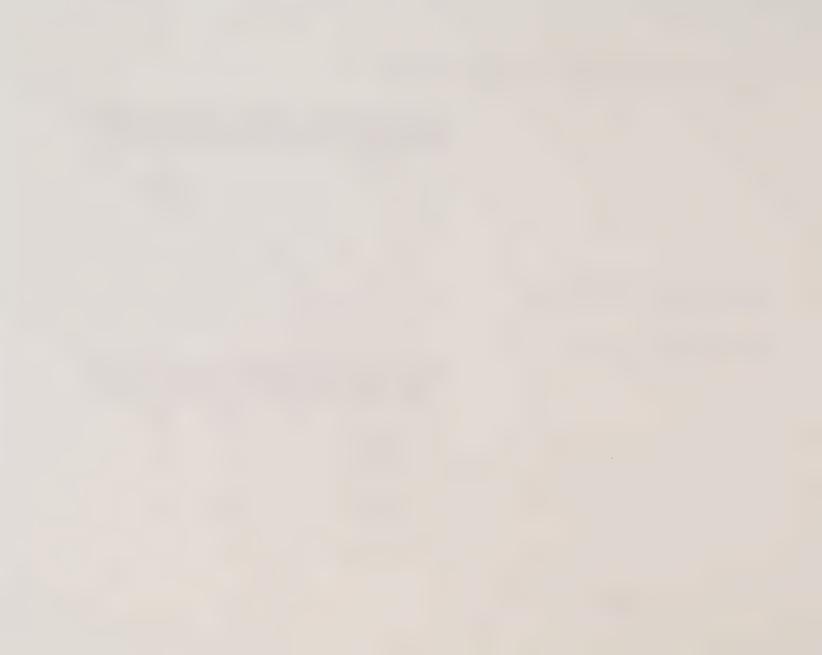
The dollar value of our exports to the U.S. is rising faster than our imports.

As a result, Canada has experienced a growing trade surplus.



#### Canada's trade balance \$ Billion 1989 1998 World ( Imports 168.1 356.1 Exports 367.1 167.7 Balance -0.4 11.0 U.S. 266.4 **Imports** 115.4 Exports 119.6 297.2 4.4 30.9 Balance

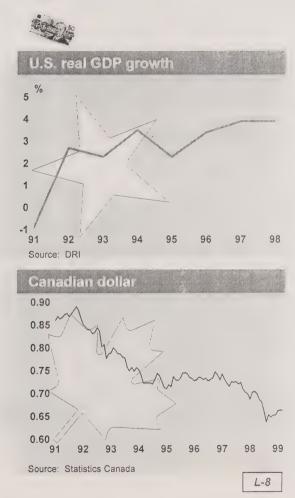
Source: Statistics Canada

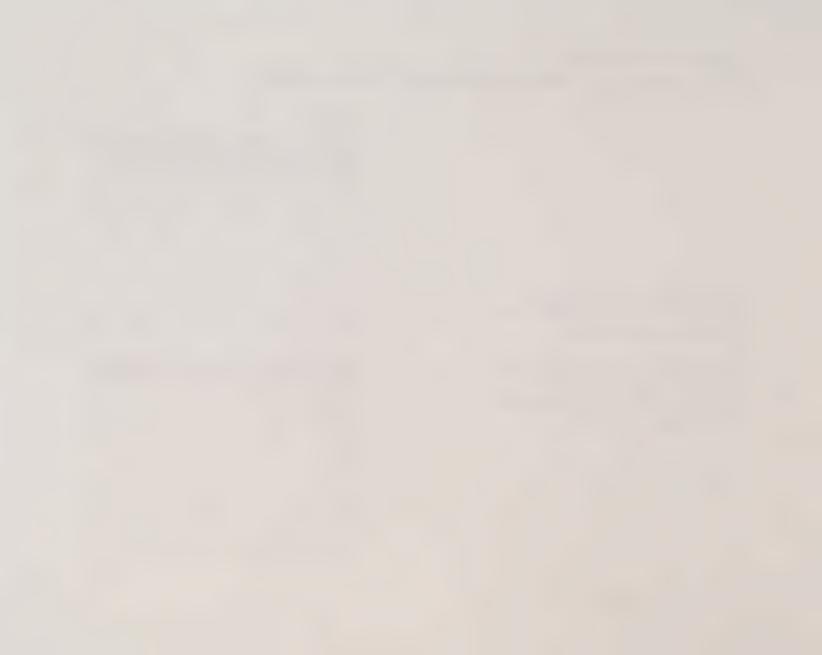


# Key factors include — the robust U.S. economy and our falling dollar...

The U.S. economy has displayed strong economic performance and growth during the 1990s.

The Canadian dollar has depreciated from around  $90 \phi$  U.S. in 1992 to below  $70 \phi$  U.S. in 1998 and 1999 (67  $\phi$  U.S. in September 1999).



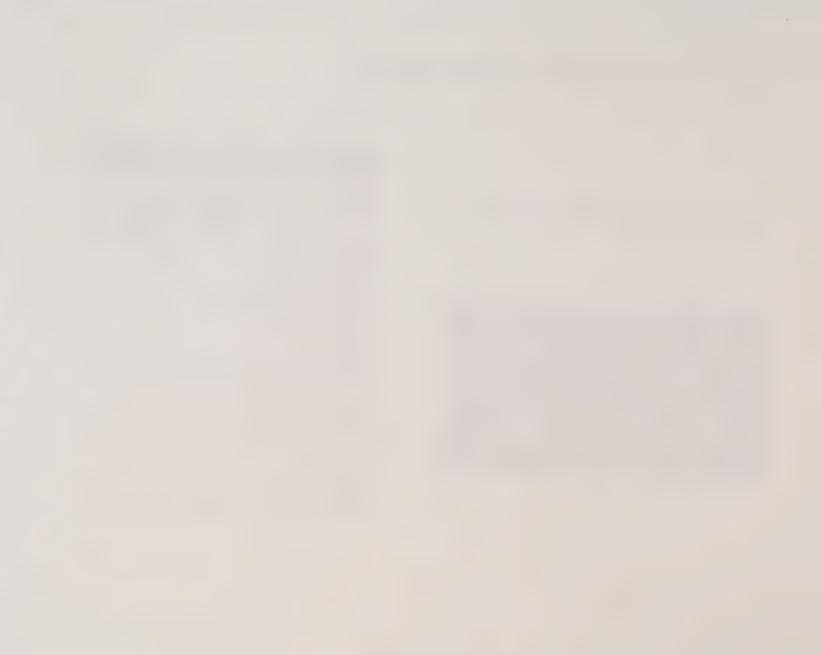


#### ...and, of course, the FTA and the NAFTA

Among other contributing factors to this fast increase in trade with the U.S. are the FTA and the NAFTA.

Since the signing of the FTA on Jan 1, 1989, virtually all tariff and many non-tariff barriers to trade in goods between the two countries have been eliminated. On Jan. 1, 1994, the NAFTA was signed — extending the FTA to important sectors such as trade in services, investment and government procurement. This helped set in motion a dynamic process that has resulted in even closer trading relationships between the two partners.



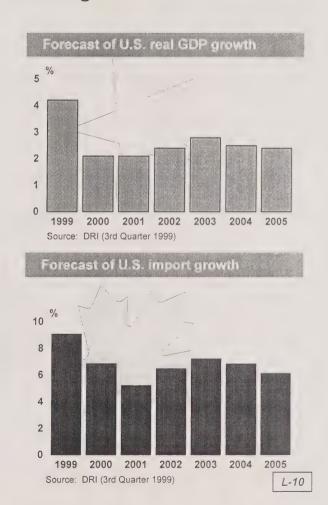


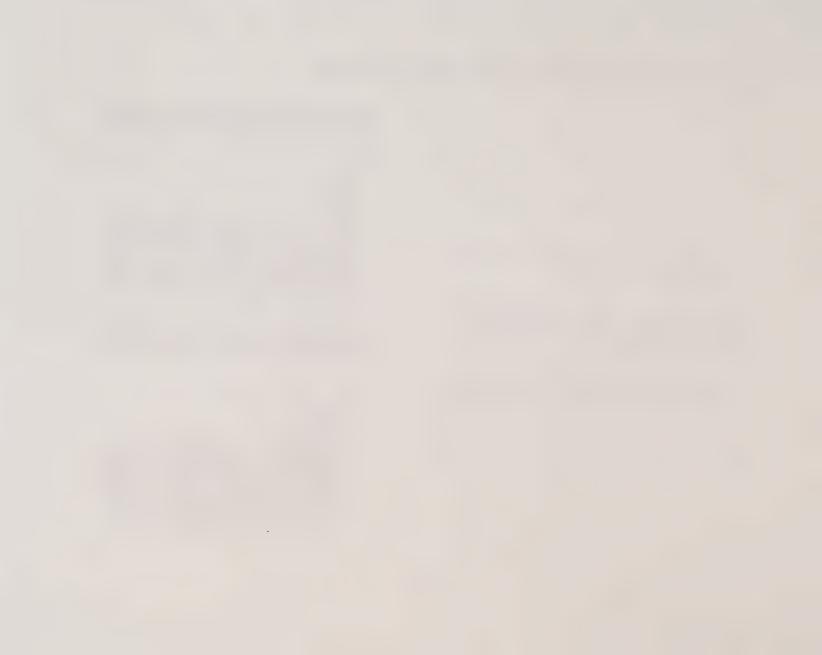
### Our trade growth prospects are also promising

The forecast for the U.S. economy is for continuing solid growth.

And U.S. import demand is expected to grow even more strongly than the U.S. economy at large.

Consequently, Canadian exports to the U.S. should continue their robust growth.





# Are our U.S.-bound exports changing in nature?





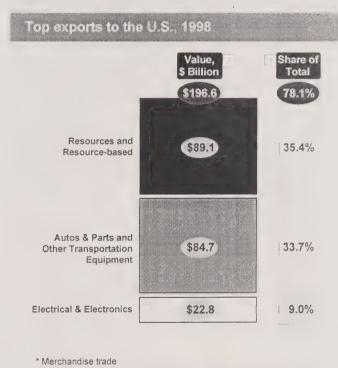
#### Canada's key exports are in traditionally strong areas...

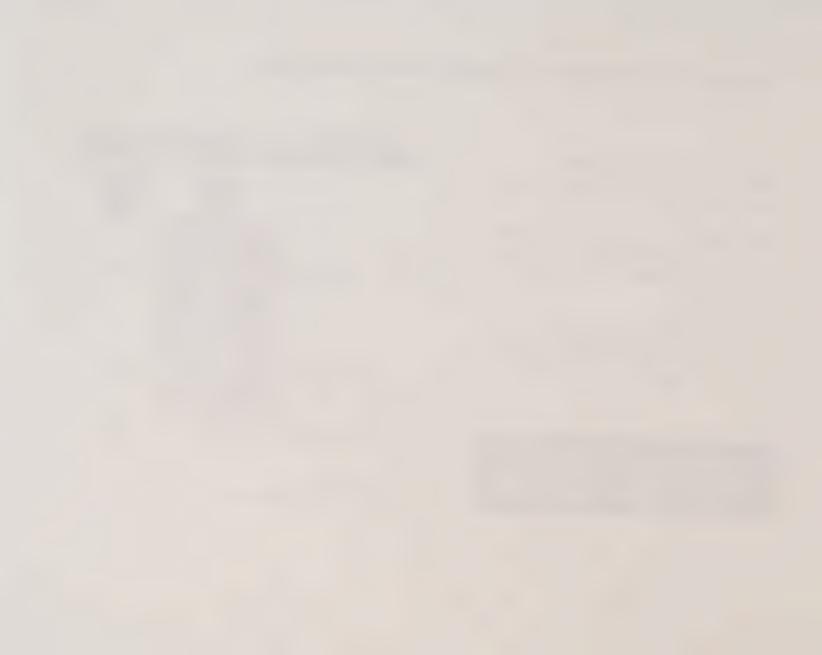
Canada is resource-rich, and our Resources and Resource-based products play a large role in our exports to the U.S.

Other top Canadian sectors for exports to the U.S. include Autos & Parts and Other Transportation Equipment, and Electrical & Electronics.

-Together, these three sectors accounted for \$196.6 billion or 78.1% of all Canada's merchandise exports to the U.S. in 1998.

However, Canada's Transportation Equipment and Electrical & Electronics industries are also key export sectors.



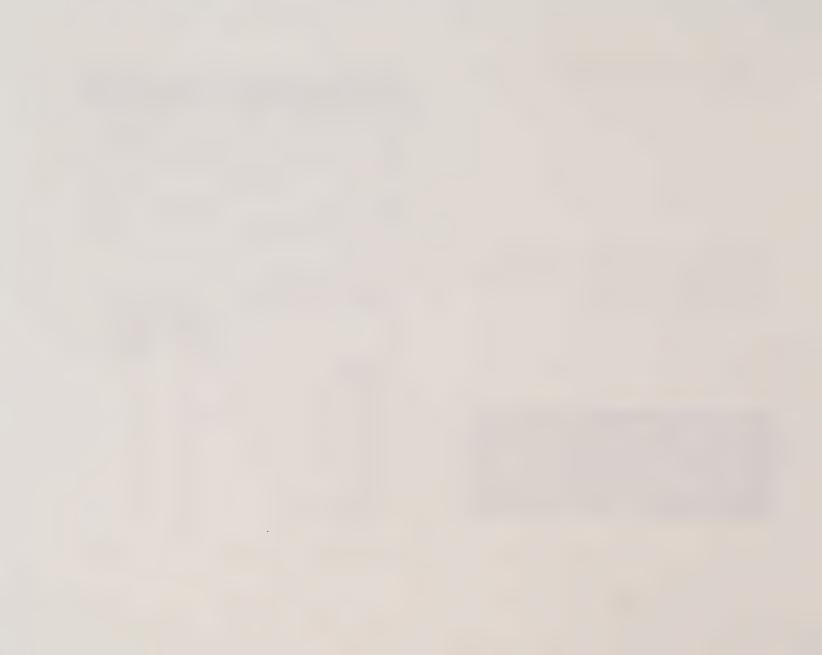


#### ...namely in resources...

In the last ten years, our Resources & Resource-based exports to the U.S. have doubled, from around \$40 billion in 1989 to almost \$90 billion in 1998.

"Raw" exports comprise about one-third of our resource exports — the larger remaining share of our resource exports is actually made up of further processed resource-based products.

#### Resources and Resource-based exports to the U.S. \$ Billion Resourcebased 60 50 40 30 20 Resources Selected sub-industries, exports to the U.S. Average **Annual** Value Growth \$ Billion 1989-98 1998 25.5 10.1 Resources Oil & Gas 17.6 9.9 Agriculture 4.5 14.5 2.4 5.5 Mining 0.9 9.3 Fishing & Trapping 0.2 13.1 Logging Resource-based 63.6 9.0 16.6 5.7 Paper 15.2 7.3 **Primary Metals** 14.9 Wood 13.9 Food 8.5 14.1 Petroleum & Coal 4.1 6.9 2.7 Non-Metallic Minerals 12.1 Beverage 1.2 8.8 Other (Leather & Tobacco) 10.1

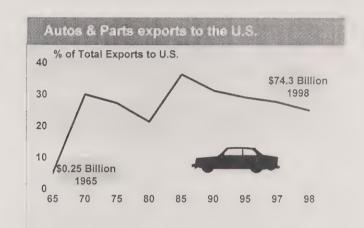


#### ...and in autos...

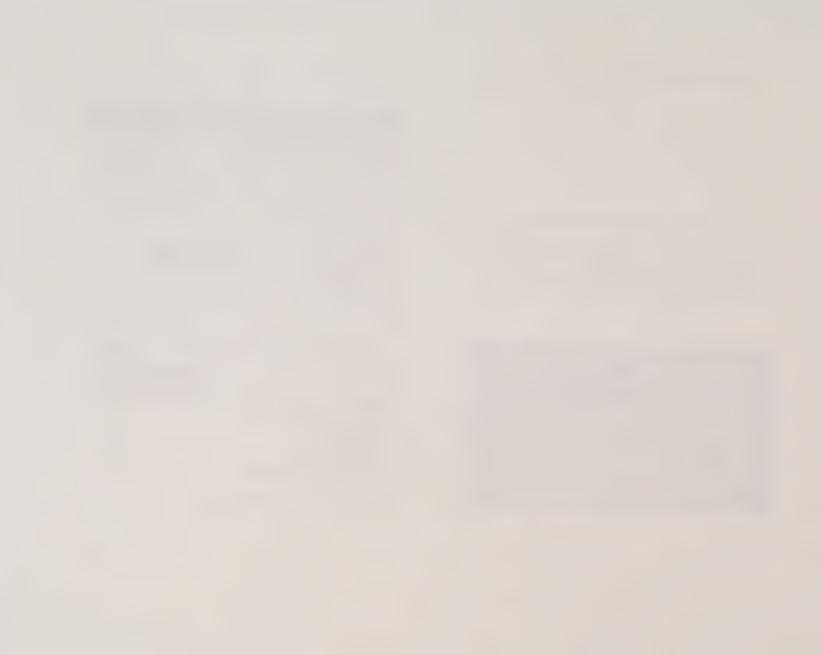
Autos & Parts have been prominent in our cross-border trade and exports with the U.S. since the implementation of the Canada - U.S. Automobile Products Agreement (Auto Pact) in 1965.

The Canadian auto sector is an integral part of the North American market.

The move to a single continental market largely began with the signing of the Auto Pact in 1965, which removed import tariffs on auto production and led to major investments and cross-border trade by General Motors, Ford and Chrysler.



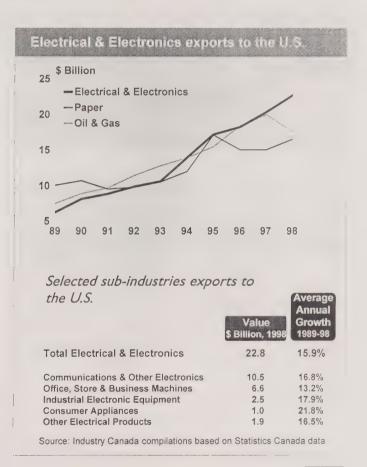
the U.S.	Value \$ Billion, 1998	Average Annual Growth 1989-98	
Transportation Equipment	84.7	9.7%	
Autos & Parts	74.3	9.2%	
Aircraft & Parts	6.7	12.5%	
Railroad Rolling Stock	2.0	14.4%	
Ship & Boat Building	0.5	19.4%	
Other Transportation Equipment	1.1	11.3%	

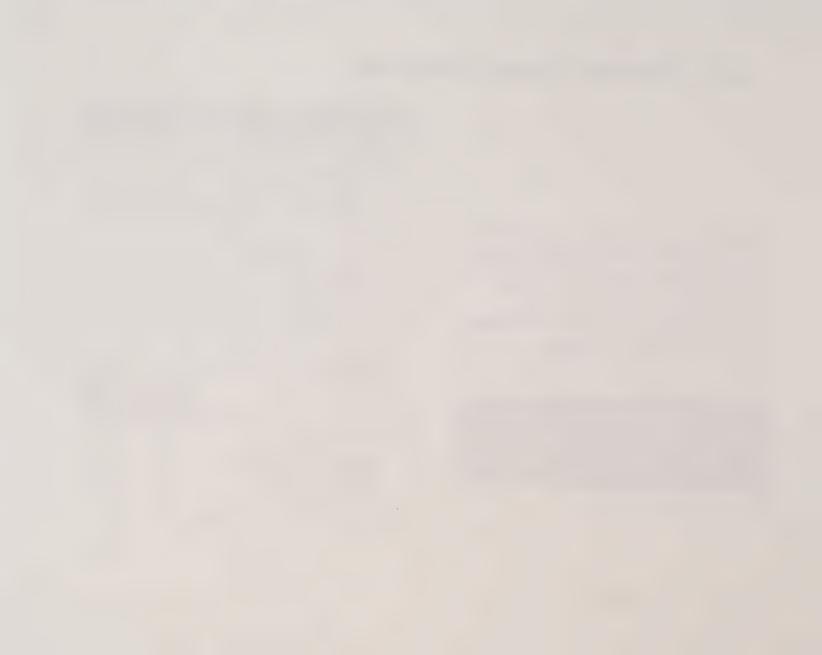


#### ...and in Electrical & Electronics industries

Within the last decade, exports to the U.S. of Electrical & Electronics have increased into greater prominence than many of our major Resources and Resource-based product exports, on the basis of fast growth in segments related to information and communication technology.

The information revolution and growing importance of computers has resulted in the rise and prominence of Electrical & Electronics exports.





#### We have comparative advantage in these sectors...

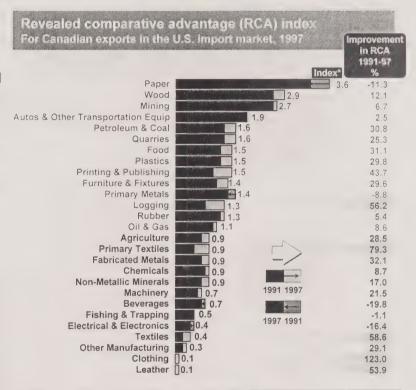
Recent figures show our comparative advantage is strengthening in most Resource & Resource-based industries, and in many other areas as well including Autos & Other Transportation Equipment.

It is noteworthy that while Canadian exports make up only a very small proportion of U.S. imports in subsectors such as clothing and leather industries, Canada's <u>relative</u> share is increasing fast.

 This may reflect budding revealed comparative advantages in new manufacturing <u>niches</u>.

In Electrical & Electronics, Canada faces strong competition from many other major and newly industrialized nations.

Revealed comparative advantage to the U.S. shows industries that provide a higher-than-average proportion of U.S. industry imports.



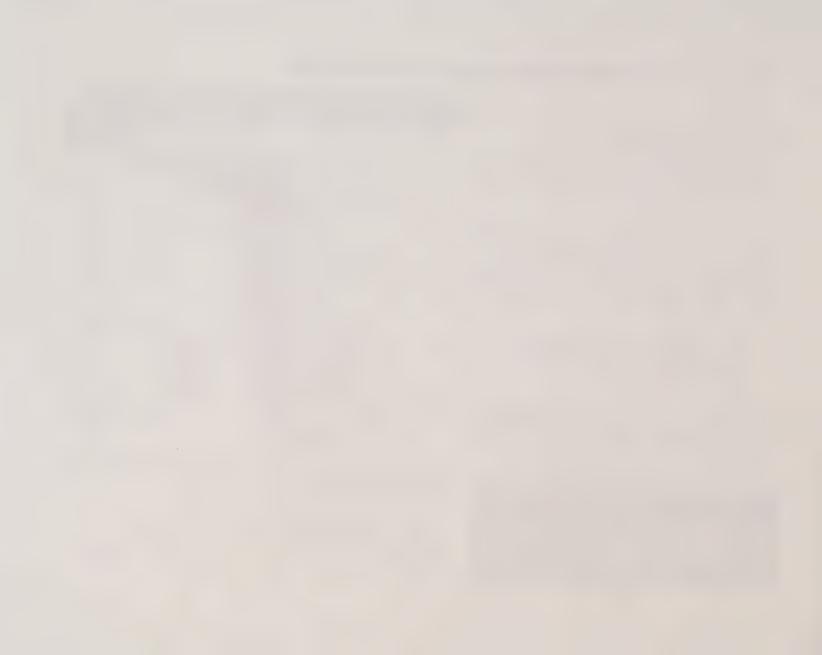
\* Canada's share of U.S. <u>industry</u> imports divided by Canada's share of U.S. <u>total</u> imports

1.0 = Canadian share of U.S. import market for all industries

An industry value greater than 1.0 indicates Canada's exports from that industry comprises a higher than average share of the U.S. import market, and a revealed comparative advantage.

Source: Industry Canada compilations based on Statistics Canada data

M-5



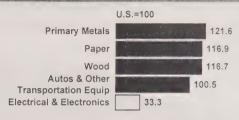
#### ...as well as higher productivity relative to the U.S.

Canada was more productive than the U.S. in 1996 in Transportation Equipment and in three of our key resource-based exports:

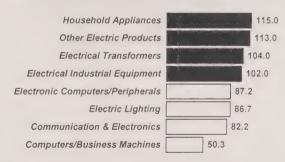
- Primary Metal
- Paper
- Wood

We are not as productive in <u>overall</u>
Electrical & Electronics, but we appear to be relatively more productive in several areas <u>within this sector</u> — including in Household Appliances, Electrical Transformers and Electrical Industrial Equipment.



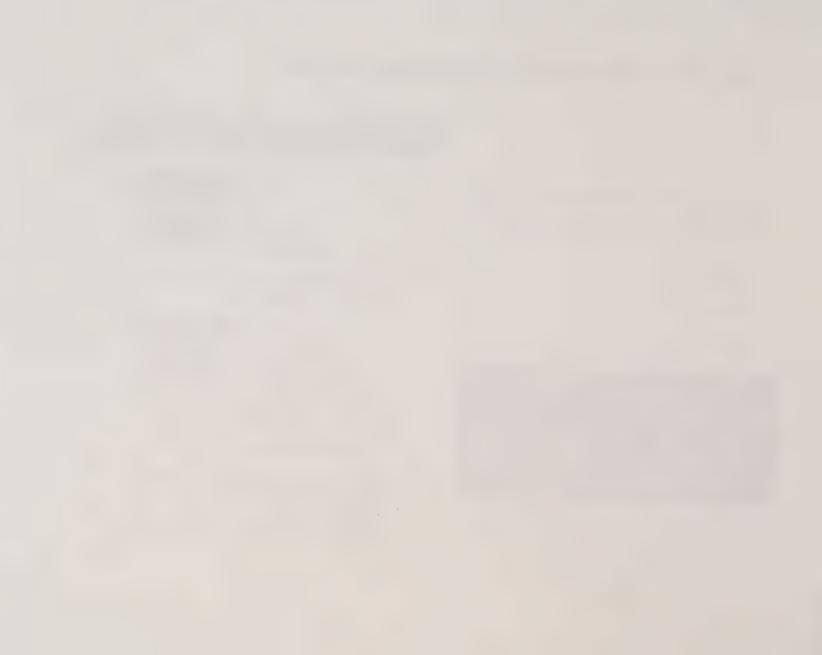


Canada-U.S. value-added per employee\*\*
Electrical & Electronics, 1996



- \* GDP per worker (U.S. GDP at market prices is converted to GDP at factor cost to make it comparable to Canadian data)
- \*\* Manufacturing value-added/ manufacturing census employment
  Note: Record Players, Radio and T.V. excluded
  Source: OECD STAN Database and industry PPPs from Dirk Pilat, "Labour
  Productivity Levels in OECD Countries: Estimates for Manufacturing and
  Selected Services Sectors," OECD Working Paper, No. 86, 1996

M-6

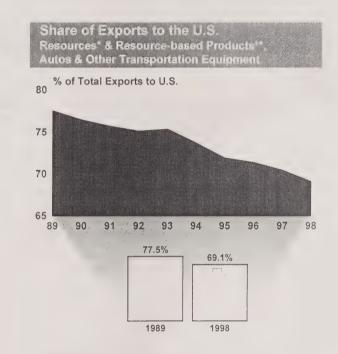


#### But these sectors' share of total exports to the U.S. is falling!...

While Resources and Resource-based Products, and Autos & Other Transportation Equipment, are still our strongest export industries to the U.S., their <a href="mailto:share">share</a> as a proportion of our total exports to the U.S. has been <a href="mailto:actually\_declining.">actually\_declining.</a>

- In 1989, they comprised 77.0% of Canada's merchandise exports, but by 1998 their share dropped to 69.1%.

However important autos and resources are to the overall strength of our exports, other industries are also growing, and quickly — making their own growing contribution to the rapid rise in Canada's exports to the U.S.

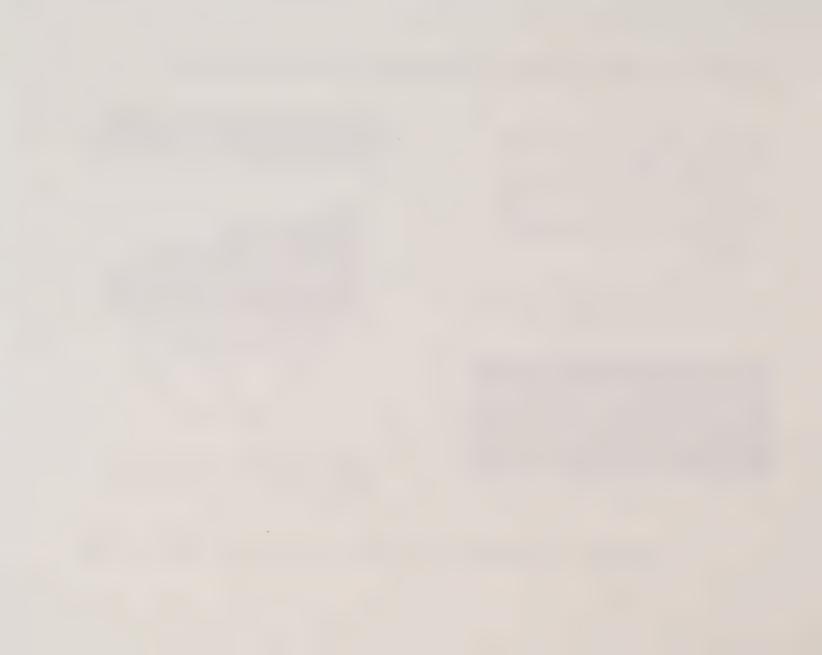


\* Agriculture and Other Primary Industries

\*\* Food, Beverage, Tobacco, Leather, Wood, Paper, Primary Metals, Non-Metallic Mineral, Refined Petroleum & Coal and Transportation Equipment. Note: Merchandise trade

Source: Industry Canada compilations based on Statistics Canada data

...because other Canadian exports are growing even quicker!



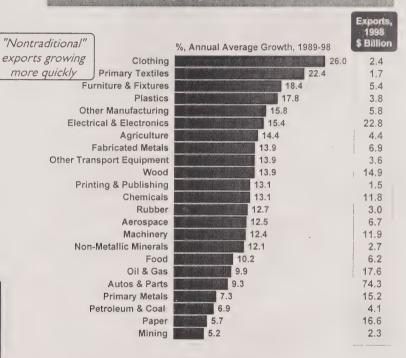
#### Our fastest growing exports span the "less traditional"

While our large traditional exports continue to grow, exports from many other sectors are growing more quickly.

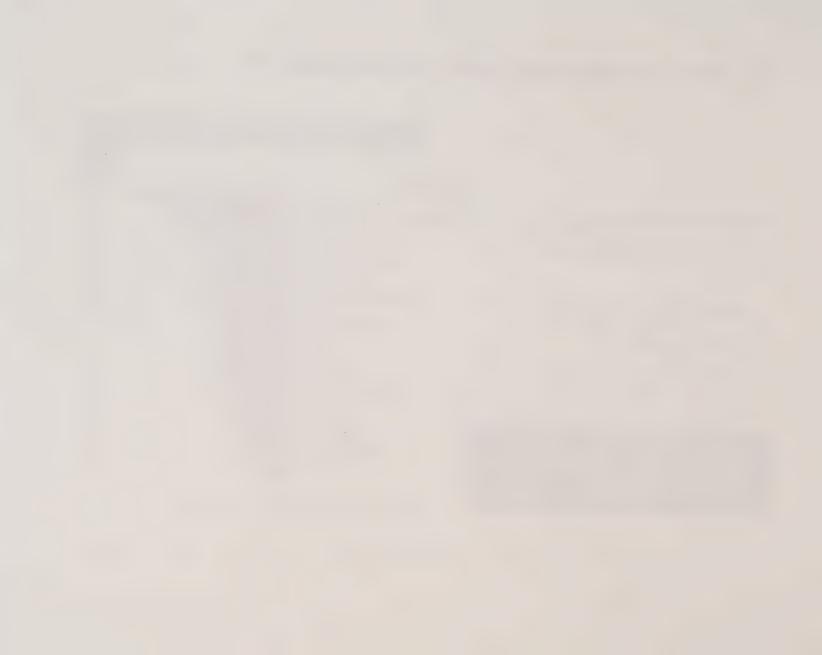
They include Clothing & Textiles, Furniture & Fixtures, Plastics and Other Manufacturing.

Several of Canada's fastest-growing exports are from industries which historically were relatively small exporters.

#### Canadian industry exports



<sup>\*</sup> Merchandise industry exports of at least \$1 billion in 1998 Source: Industry Canada compilations based on Statistics Canada data



## While they include some high-knowledge activities...

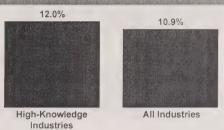
Indeed, these higher knowledge industries are increasing their exports to the U.S. at a slightly faster than average rate.

Exports from such high-knowledge industries include —

- Pharmaceuticals
- Plastics
- Communication & Electronic Equipment
- Electrical Industrial Equipment

Canada is increasingly making itself known as a home to important knowledge-intensive industries.

## Growth in exports to the U.S. by knowledge intensity\*, 1989-1998

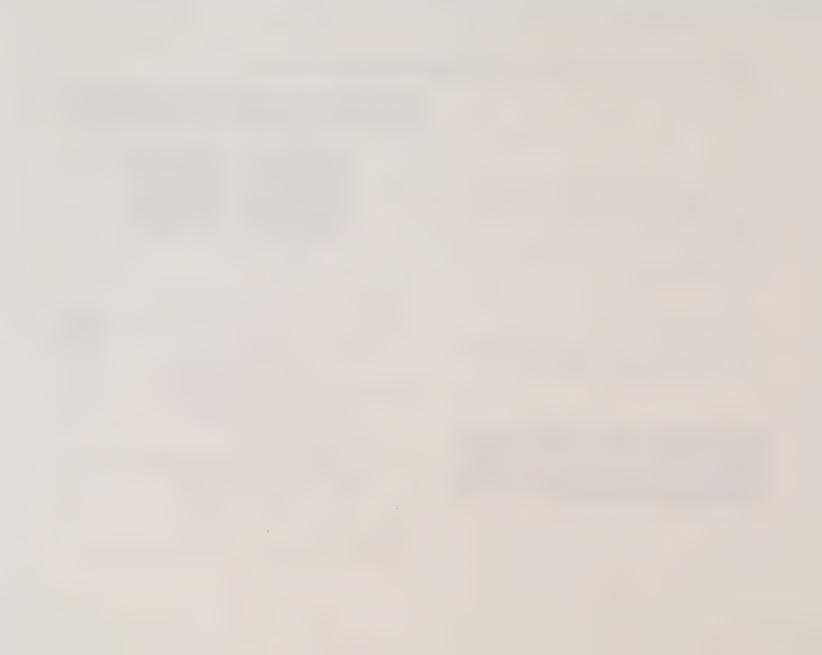




<sup>\*</sup> Calculated as the ratio of university-educated employees to total employees, goods producing sector.

\*\* Industries (3-digit SIC) with more than \$500 million in exports in 1998 Source: Industry Canada compilations based on Statistics Canada data

M-9



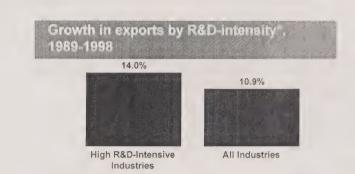
### ...and innovative industries...

Innovative industries, as measured by their propensity to undertake R&D, are increasing their exports to the U.S. at a very fast clip.

Among the top innovative industries are Pharmaceuticals, Industrial Electrical Equipment, Machinery, Aircraft & Parts and Telecommunication equipment.

They also include smaller exporters of Man-made Yarn and Agricultural Chemicals.

Our future prosperity depends on faster innovation, and in fostering new and better products and services.



### Fastest-growing R&D-intensive\*\* exports

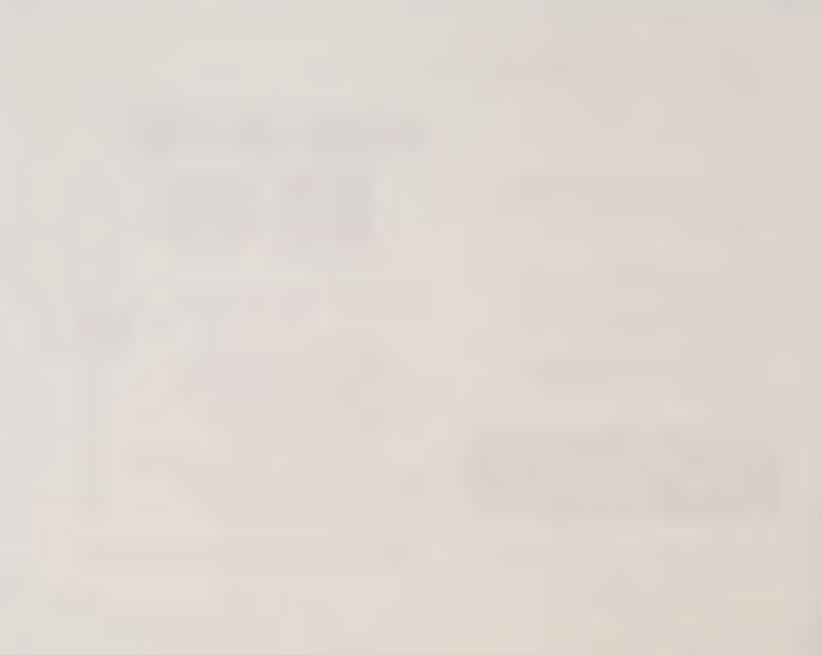
rascese growing nas incensive experts	
%, Annual Average Growth, 1989-98  Larger Exporters ( >\$1 Billion)	Exports, 1998 \$ Billion
Plastic & Synthetic Resin 20.5 Electrical Industrial Equip 117.9	3.3 2.5
Communication & Other Electronics 16.8	10.5
Other Chemicals 15.1 Railroad Rolling Stock 14.4	1.1 2.0
Other Machinery & Equipment 14.0  Business Machine 13.2	10.4 6.6
Aircraft & Parts 12.5	6.7
Smaller Exporters ( <\$1 Billion)	
Pharmaceuticals 32 Communications & Energy Wire & Cable 19.4	1.0
Man-made Fibre & Filament Yarn 17.5  Agricultural Chemicals 15.3	0.7
Other Electrical 11.4	0.6

<sup>\*</sup> Calculated as R&D spending / sales

<sup>\*\*</sup> Industries (2 and 3-digit SIC) with more than \$500 million in exports in 1998

Source: Industry Canada compilations based on Statistics Canada data

M-10



# ...our fast-growing exports reflect many industries' successful shift to a "North American" orientation

The U.S. market is becoming increasingly important to almost all industries in the present 1991-98 upswing.

In many industries, the U.S. market is growing considerably faster than the Canadian market, contributing to export growth and the increasing U.S. orientation of our industries.

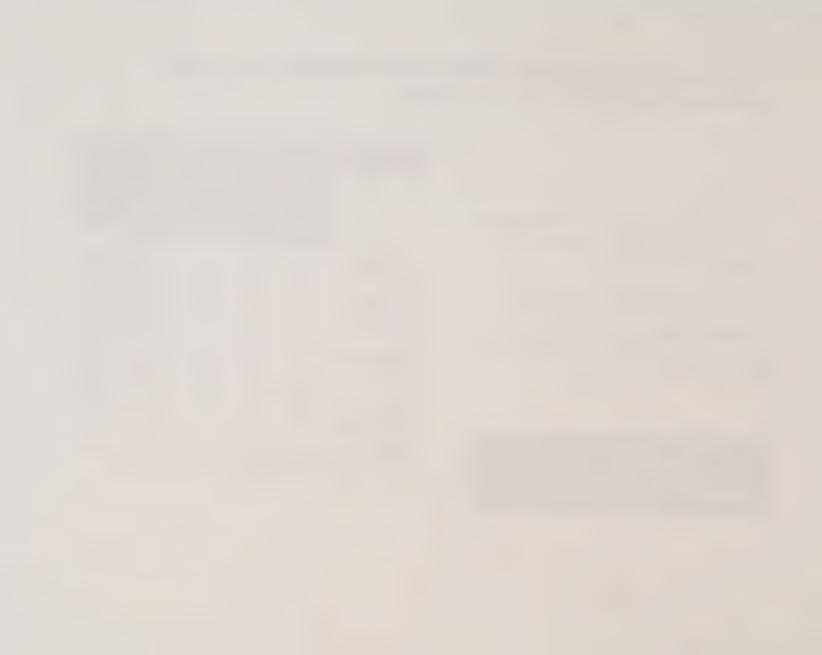
For several Canadian industries, the U.S. market is relatively more important than the Canadian market.

Select fast-growing export industries						
	Growth in Canadian	Growth in U.S.	Difference In Growth Rates	Trade Orientation to U.S.		
	Market 1991-97	Market 1991-97	of Markets 1991-97	Growth 1991-97	1997 Value	
	% Ch	ange		% Change		
Furniture & Fixtures	-2.2	11.7	13.9	121.0	69.6	
Non-Metallic Minerals	2.5	10.7	8.2	113.9	30.8	
Clothing	1.2	7.6	6.4	366.7	28.0	
Wood	6.5	12.7	6.2	62.4	51.0	
Electric & Electronics	9.0	14.4	5.4	51.6	69,3	
Printing & Publishing	3.0	7.5	4.5	159.4	8.3	
Fabricated Metals	6.0	9.3	3.3	98.4	25.4	
Petroleum & Coal	2.0	4.9	2.9	59.0	27.5	
Plastics	7.7	10.5	2.8	87.5	33.0	
Food	4.2	5.2	1.0	75.3	14.2	
Other Manufacturing	6.7	7.7	1.0	. 114.4	60,9	
Chemicals	7.4	8.2	0.8	93.4	37.9	
Primary Textiles	6.9	7.3	0.4	130.6	36.9	
Rubber	8.6	8.8	0.2	46.1	63,7	
Paper	7.2	7.1	-0.1	8.1	49.3	
Machinery	12.0	11.9	-0.1	46.2	55.4	
Primary Metals	11.6	9.5	-2.1	28.4	52.9	
Transportation Equipmen	t 12.6	9.3	-3.3	-0.1	73.6	

Industries more dependent on U.S. than Canadian markets

Trade Orientation to U.S.: Canadian exports to U.S. divided by Canadian Shipments

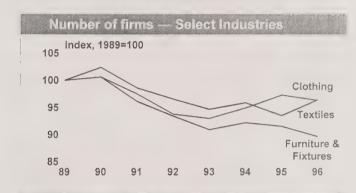
Source: Industry Canada compilations based on Statistics Canada data
and U.S. Department of Commerce data.

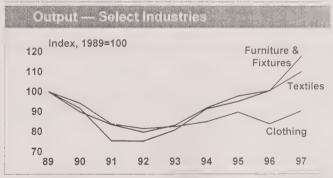


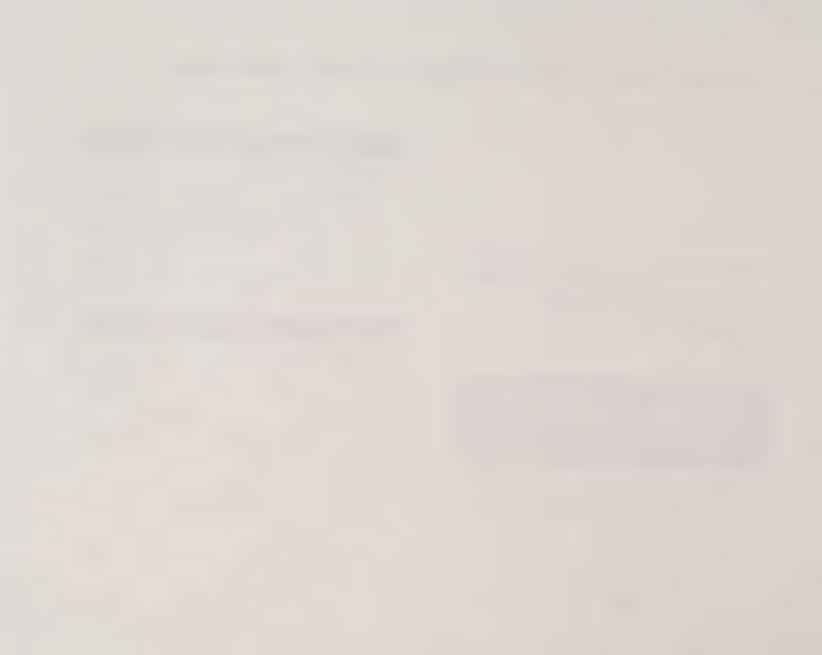
## For many Canadian industries, this has meant a refocussing...

Some industries underwent considerable adjustment. In many of these cases, there was, over a number of years, an associated shake-out of weaker operations.

But the survivors who restructured and re-oriented activities to take advantage of the broader North American market have done well.

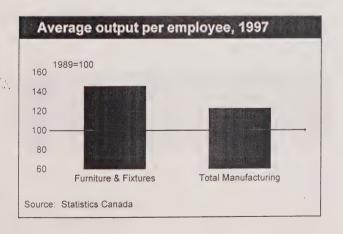


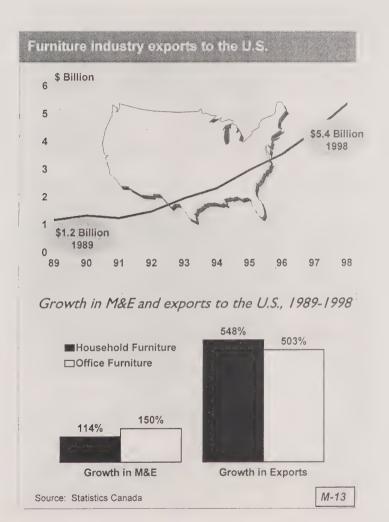


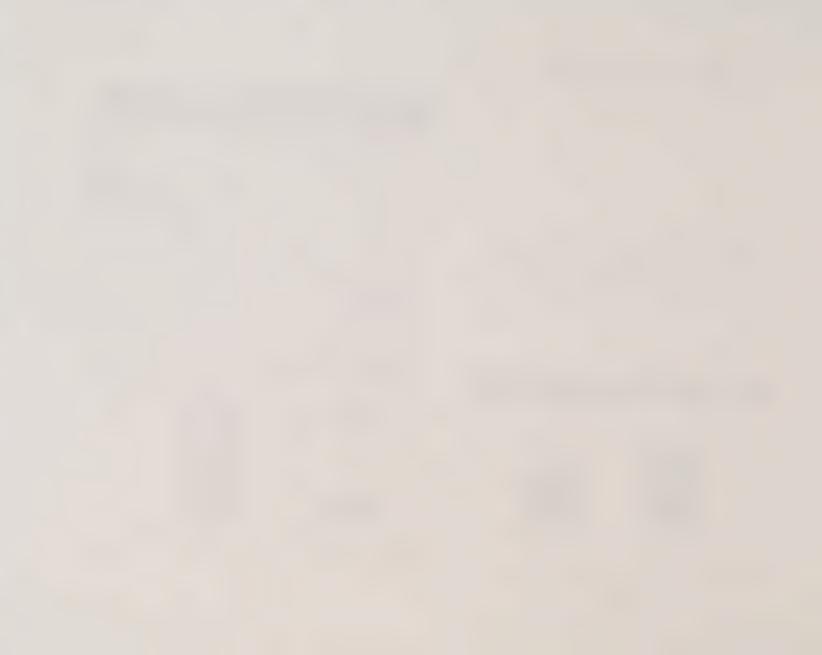


## ...greater specialization...

For instance, the Furniture industry invested heavily in M&E, and increased its productivity — and saw its exports to the U.S. increase dramatically in the 1990s.







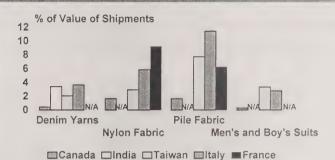
## ...and the pursuit of niches

Textiles productivity improved considerably during the 1990s. And Clothing has benefitted from niche selling into the growing U.S. market.

Key advantages for Canadian producers selling in the U.S. market versus other international competitors include our proximity plus the fact that other countries still face U.S. tariffs.

The FTA and the NAFTA have benefitted our industries by providing free access to a large market.

## Transportation and insurance costs to U.S. in select Clothing & Textile items

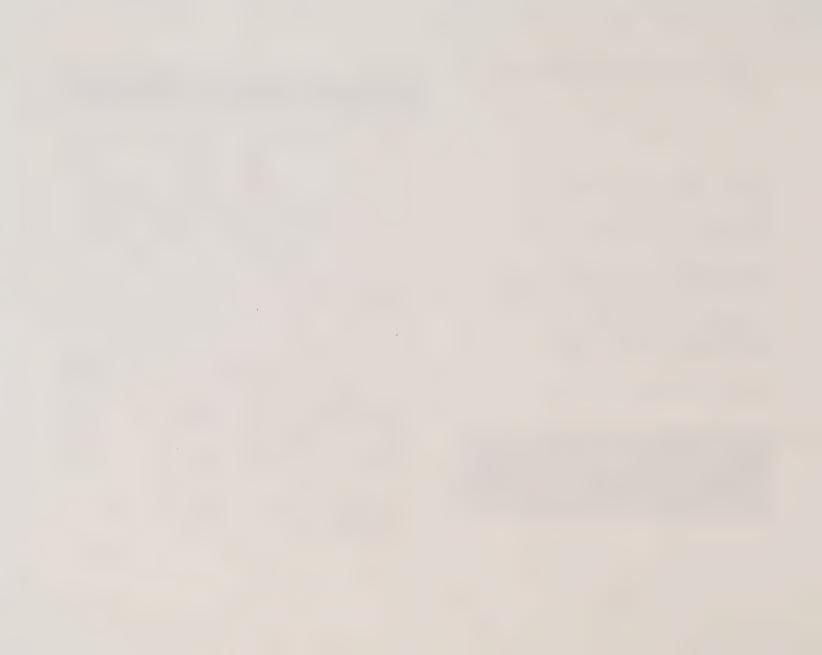


Source: Industry Canada compilations based on data from U.S. Dept. of Commerce

#### U.S. Tariffs\* on select Clothing & Textile items

Mos	t favoured nations	+
Lady's Cotton Sweater	18.6%	0%
Lady's Polyester Sweater	33.1%	0%
Baby's Cotton Knitted Sweater	18.0%	0%
Baby's Cotton Knitted Dress	11.8%	0%
Boy's Jeans	17.2%	0%
Roll of Spun Yarn for Wholesale	10.2%	0%
Man's Wool Suit	19.2%	0%

Quotas also play an important role in restricting imports.
 These product niches may face future multilateral protection reductions.
 Source: U.S. Customs Office



## Canada's services exports are also increasing...

Service industries are feeling the effects of globalization and the information revolution, and are becoming much more tradeable.

As with merchandise trade, the U.S. is the dominant destination of Canada's services exports — and they are increasing fast.

Commercial services, which include many industries essential to an increasingly knowledge-based economy (e.g. telecommunications, finance, engineering and business services), constitute a large part of our services exports and imports with the U.S.

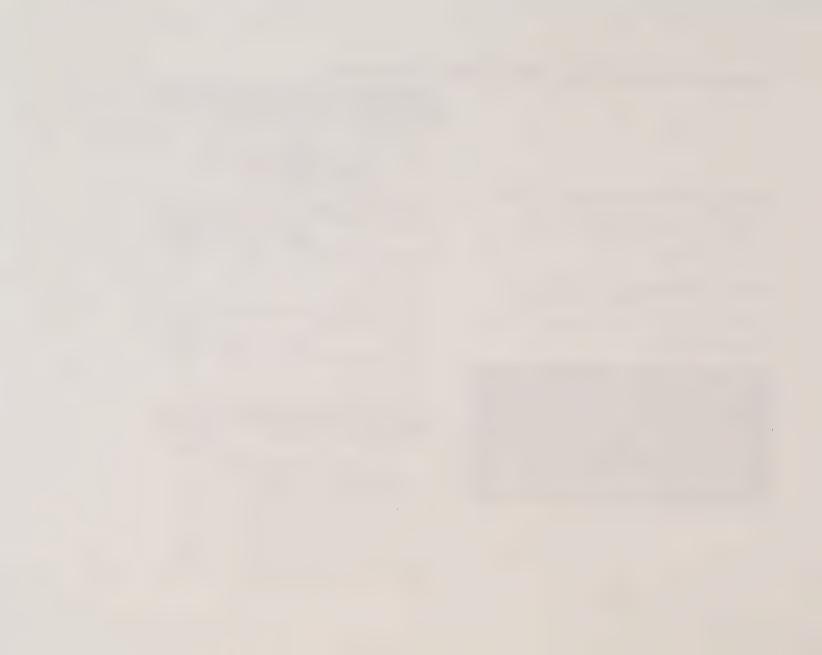


### Service imports from the U.S. by type

\$ Billion	1989	1998	% Change 1989-98
Commercial Services	* 8.7	17.5	101.1
Travel	6.7	15.8	81.6
Transportation	2.4	5.1	112.5

\* Commercial Services include minute trade in Government Services





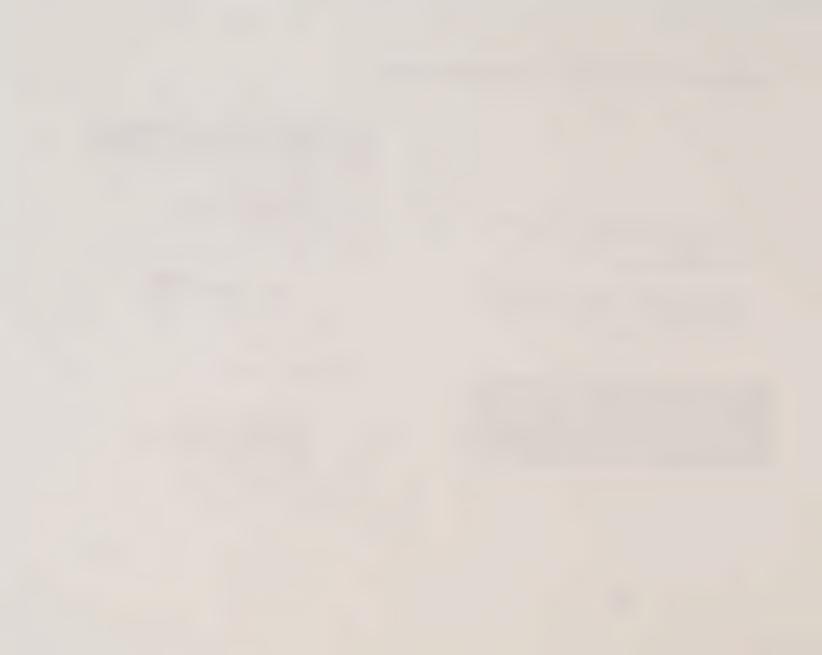
### ...albeit not as fast as merchandise trade

The growth in Canadian services trade have lagged behind that for merchandise trade.

Canada's export growth in services is also considerably lower than that for the U.S. and the world.

Canada's export of services grew about 31% slower than for merchandise products, and about 80% slower than U.S. services exports.

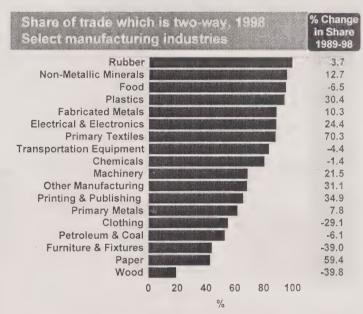




## Intra-industry trade is increasing...

Our trade with the U.S., while reflecting greater industry specialization and comparative advantage, is resulting in more intra-industry or two-way trade flows within industries.

 A number of industries, such as Rubber, Food, Plastics and Fabricated Metals display considerable intra-industry trade.



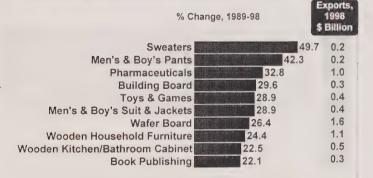
<sup>\*</sup> Two-way trade is measured as (1-|Exports-Imports|/(Exports+Imports))\*100. A value of 100 indicates balanced international trade at the industry level, while a value of 0 indicates that trade is one-way.

## ...especially in high value-added activities

Canada's intra-industry merchandise trade with the U.S. is growing more rapidly among higher value-added industries.

So too, are Canada's exports to the U.S., which are increasingly reflecting higher value-added activities.

#### Fast-growing, high value-added exports\* to the U.S.



\* Industries (4 digit SIC) with \$200 million or more in exports in 1998. Source: Industry Canada compilations based on Statistics Canada data

## Two-way trade with the U.S. by value-added

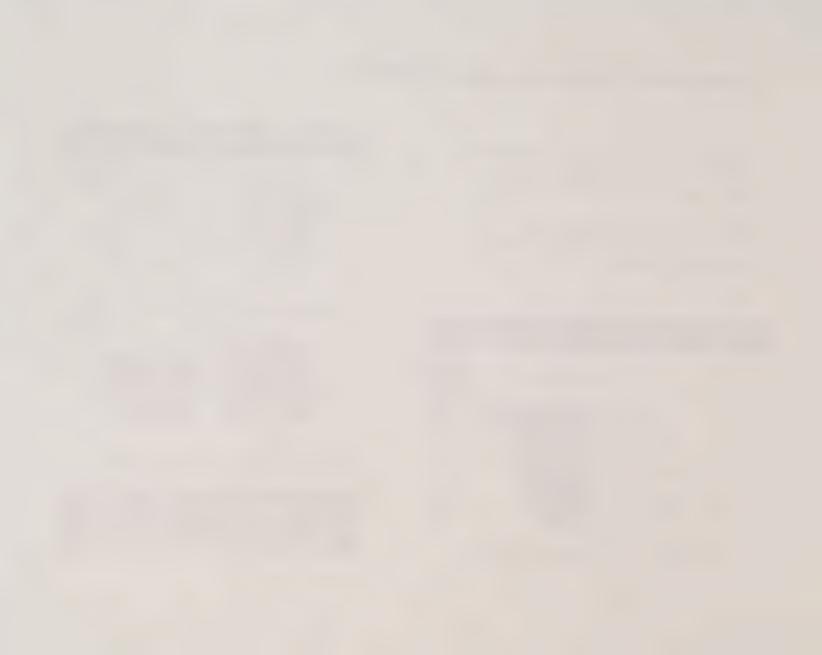


### Exports to the U.S. by value-added\*



\* Calculated as value-added/shipments, manufacturing sector Source: Industry Canada compilations based on Statistics Canada data

Globalization and the information revolution are spurring movement into higher value-added endeavours.



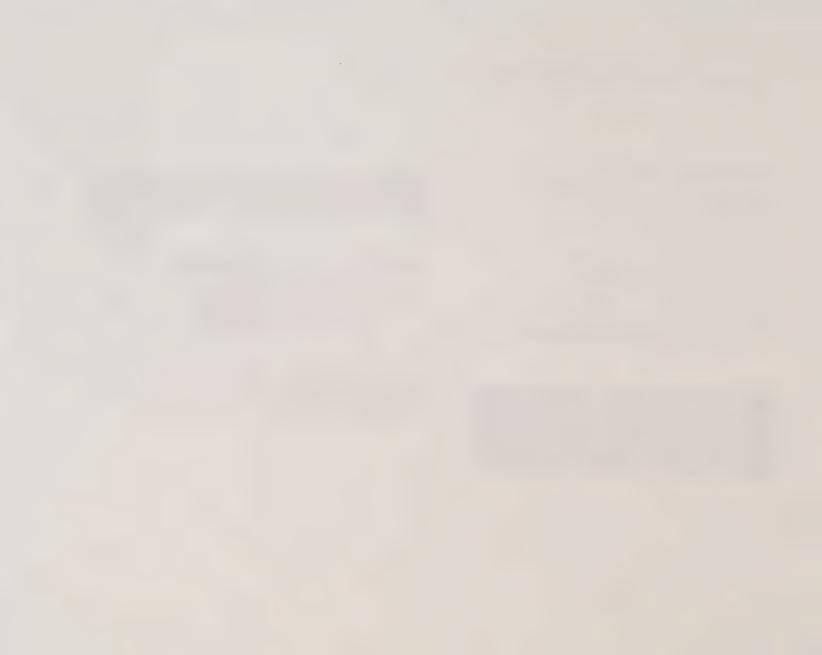
### ...and in commercial services

Intra-industry trade in services is most significant in Engineering & Equipment Rentals and in Telecommunication & Computers.

Commercial services include industries at the heart of the innovation system, that are key to global business — namely financial services and business management.

Commercial Services have been undergoing rapid transformation — driven by innovative products, advanced technologies, and increased competition.





## A major element of intra-industry trade is intra-firm trade

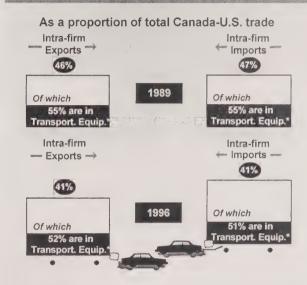
Among U.S.-controlled firms in Canada, 70.6% of exports and 68.0% of imports are of an intra-firm nature. Autos and Auto Parts comprise a large part of these intra-firm activities.

While intra-firm trade continues to grow, it has not generally kept pace with the growth in two-way trade.

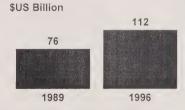
Consequently, the <u>share</u> of intra-industry merchandise trade conducted on an intra-firm basis has declined. Two-way trade has also been growing due to specialization outside of trade between related firms.

Intra-firm trade refers to international trade in products and services which stay within a MNE. The trade patterns of U.S.-controlled firms underscore the strong link between trade and foreign direct investment.

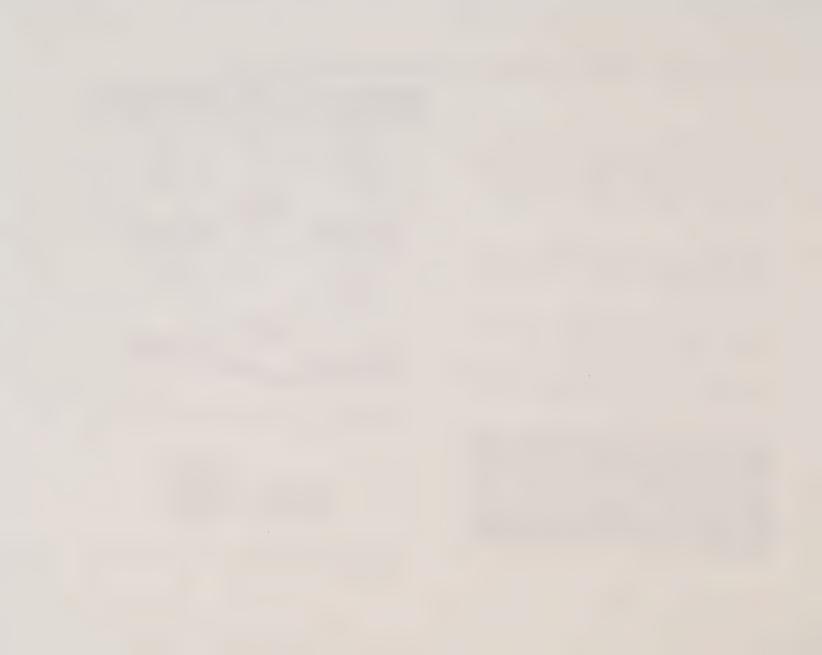
### Intra-firm trade between Canadian and U.S. firms



Intra-firm trade between Canadian and U.S. firms



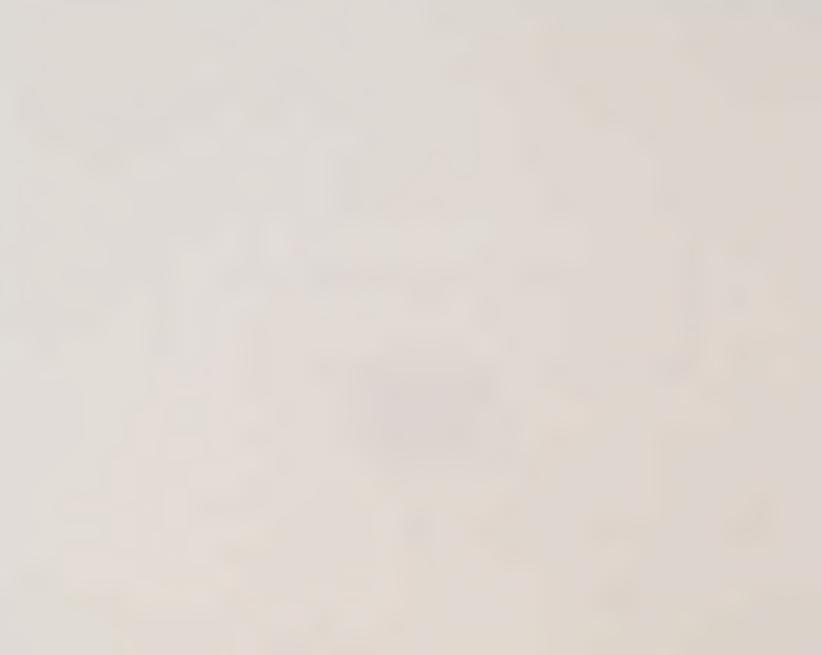
<sup>\*</sup> Excludes trade of U.S. affiliates of Canadian MNEs Source: Industry Canada compilations based on U.S. Department of Commerce data



Where do we export in the U.S.?







## While we export mostly to the northern-most states...

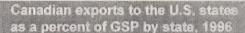
A substantial portion of our exports to the U.S. goes to the northern-most states, which includes states around the Great Lakes and between the Ohio and Mississippi Rivers.

 Michigan alone receives 22% of our exports, but 77% of this is related to the automotive industry.

When our exports are compared to the size of individual states' economies, it can be seen that our exports to Vermont equal more than a quarter of their output.

Michigan and North Dakota are also among our top trading partners.

Northern U.S. markets are within easy travelling distance of all major Canadian urban centres.





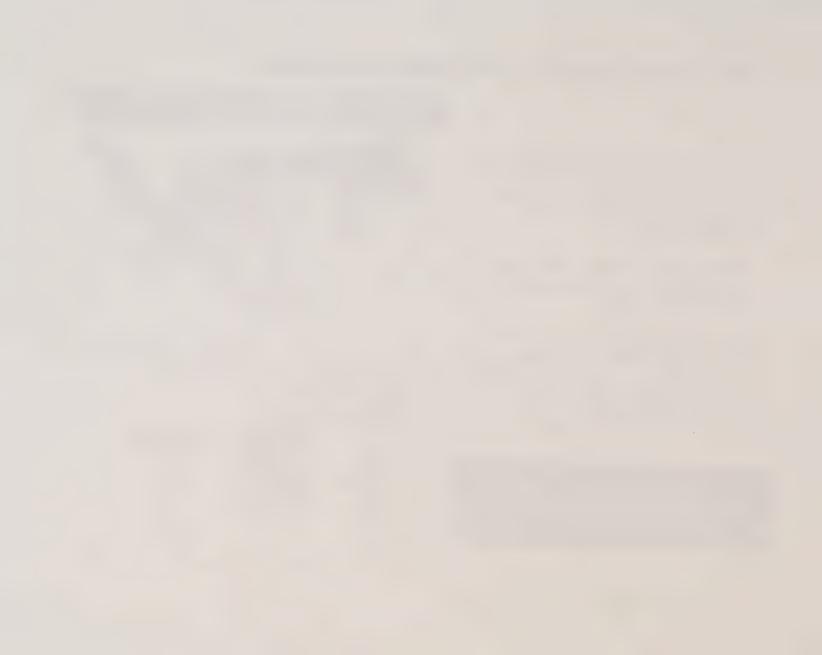
Source: Industry Canada compilations based on Statistics Canada and the U.S. Dept. of Commerce data

#### Select U.S. Markets

	Exports/GSP 1996, %	Exports 1998, \$ Billion
Vermont	26.5 (1)	5.6 (12)
Michigan	15.7 (2)	59.5 (1)
North Dakota	7,2 (3)	1.5 (32)
Maine	5.7 (4)	2.6 (24)
Montana	5.2 (5)	1.7 (30)
New York	2.6 (11)	34.1 (2)
California	0.8 (41)	15.6 (3)
Illinois	2.3 (14)	14.3 (4)
Ohio	2.5 (12)	13.0 (5)

Source: Statistics Canada and the U.S. Dept of Commerce

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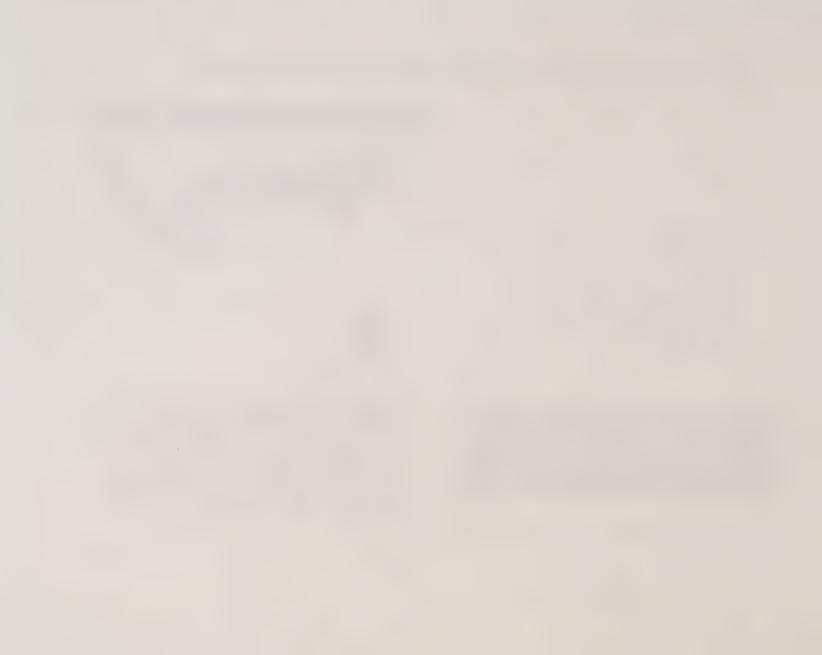
## ...we are broadening our exports quickly to other states, too...

More and more of our Canadian exports are headed further south.

- States which are "further away" realized a 6.2 percentage point increase in Canadian imports between 1989-98.

While most of our exports go to neighbouring states, we are making in-roads in U.S. markets that are further away.



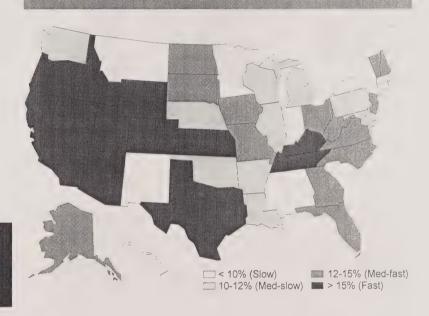


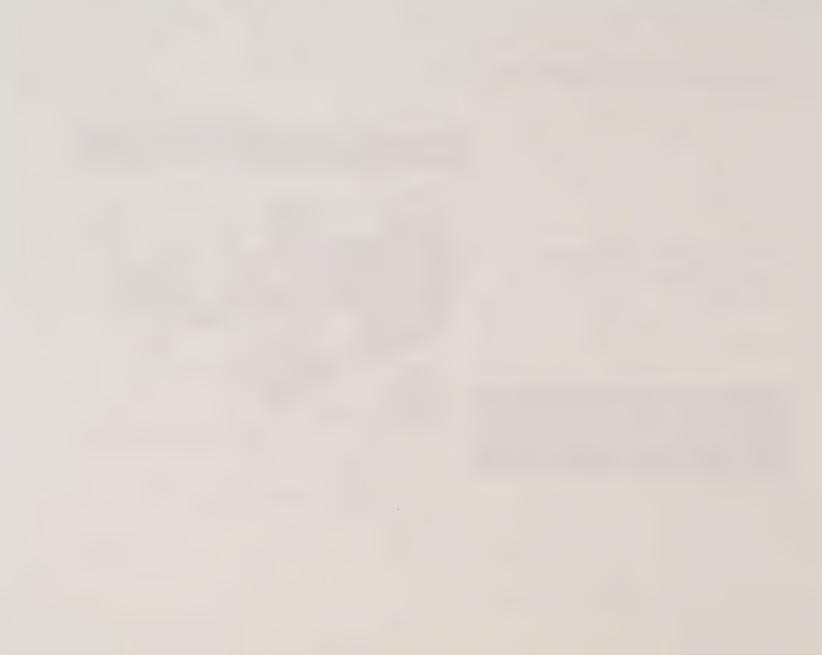
## ...especially in the southwest

In fact, some of our highest export growth is in markets in the west and southwest.

The west and southwest are fast-growing U.S. regions, and are providing expanding markets for our exports.

### Average annual growth in exports to U.S. states, 1989-98





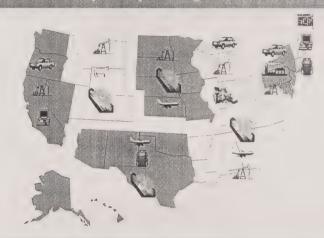
## Key exports vary by U.S. region...

Our resources and resource-based products, such as Oil & Gas and Wood Products (Sawmill & Planing Mill) are among the top exports in a majority of U.S. markets.

Our motor vehicles exports are mainly destined to the mid-west, Middle Atlantic and Pacific regions of the U.S.

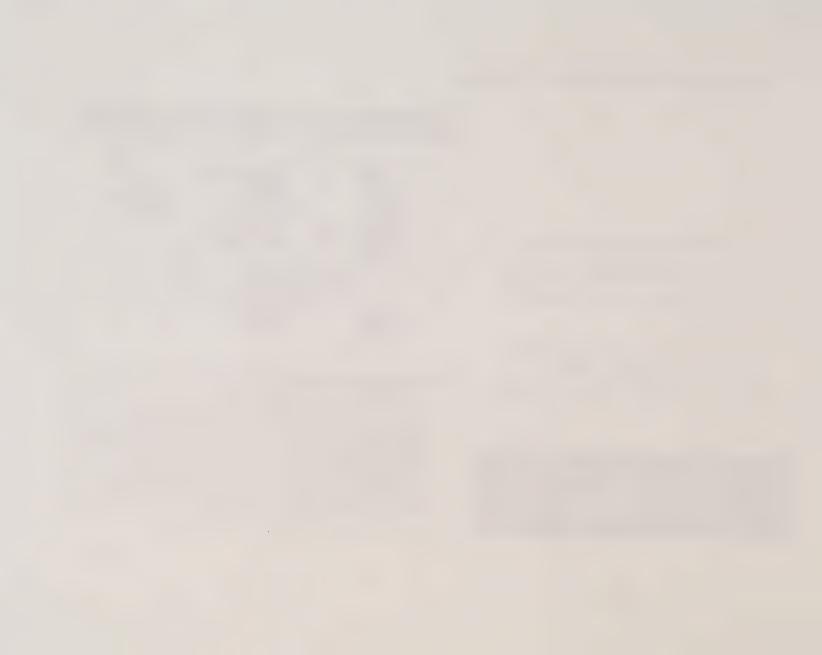
Aerospace, Computers & Peripherals and Electronic Parts are now top exports in a number of markets.

### Top 3 Canadian exports by U.S. region\*, 1998



### Goods Producing Industries



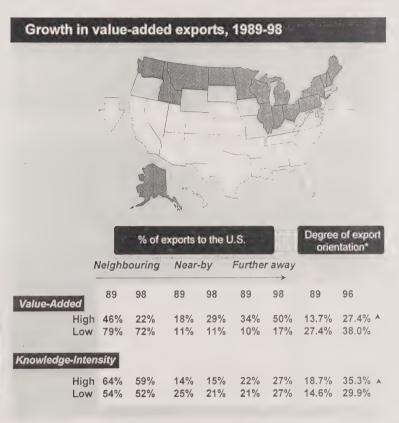


## ...but all U.S. regions are importing higher value-added products

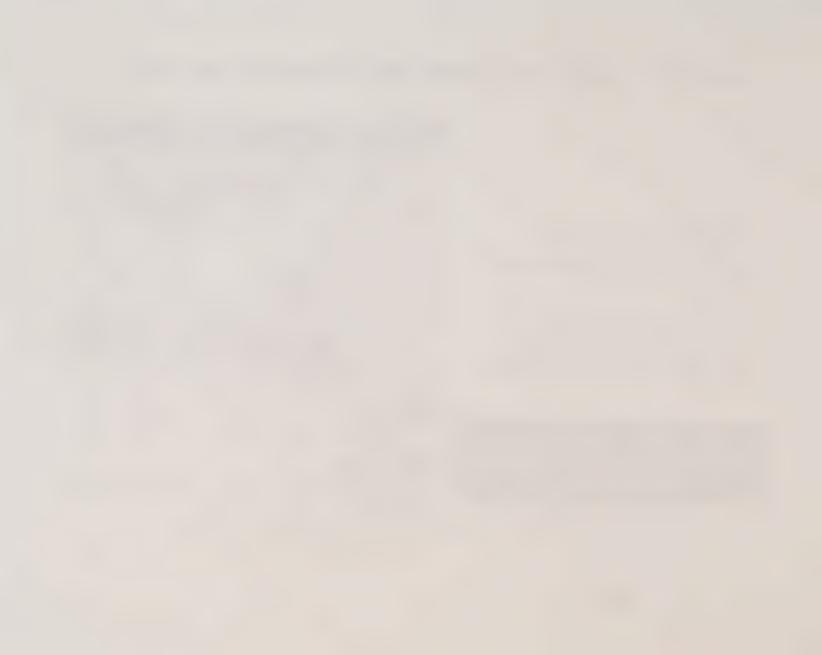
Higher value-added products are growing rapidly, although low value-added exports comprise a larger share of our total exports.

An increasing proportion of our high value-added and high-knowledge products are also being exported to more southern destinations in the U.S.

We are witnessing a shift toward value-added exports which is stronger to the southern U.S.



<sup>\*</sup> Ratio of Canadian exports to the U.S., to Canadian GDP Source: Industry Canada compilations based on Statistics Canada data



## Investment and R&D





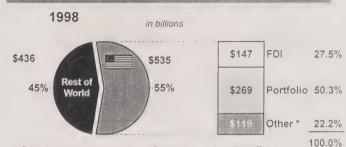


### The U.S. is our most important foreign investor...

The U.S. is our dominant source of foreign capital — accounting for more than half (55%) of the foreign capital invested here in 1998.

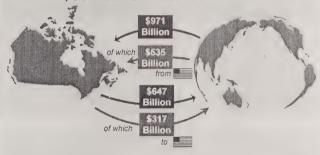
- About one-quarter of this is in the form of U.S. direct investment.
- In 1998, U.S. direct investment in Canada exceeded 67.7% of total foreign direct investment (FDI).

#### Foreign investment position in Canada



\* Other investment includes loans & allowances, deposits, official international reserves, and other assets Source: Statistics Canada

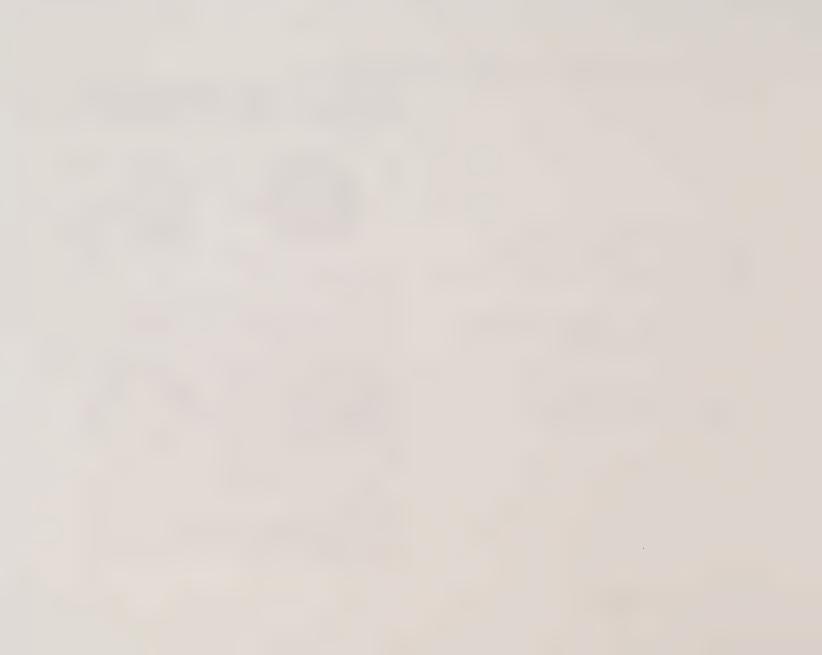
## Foreign investors have invested \$971 billion into Canada.



Source: Statistics Canada

Canadian companies and investors have invested \$647 billion outside Canada.

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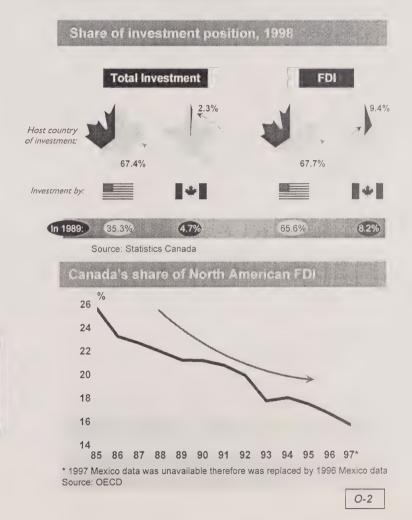


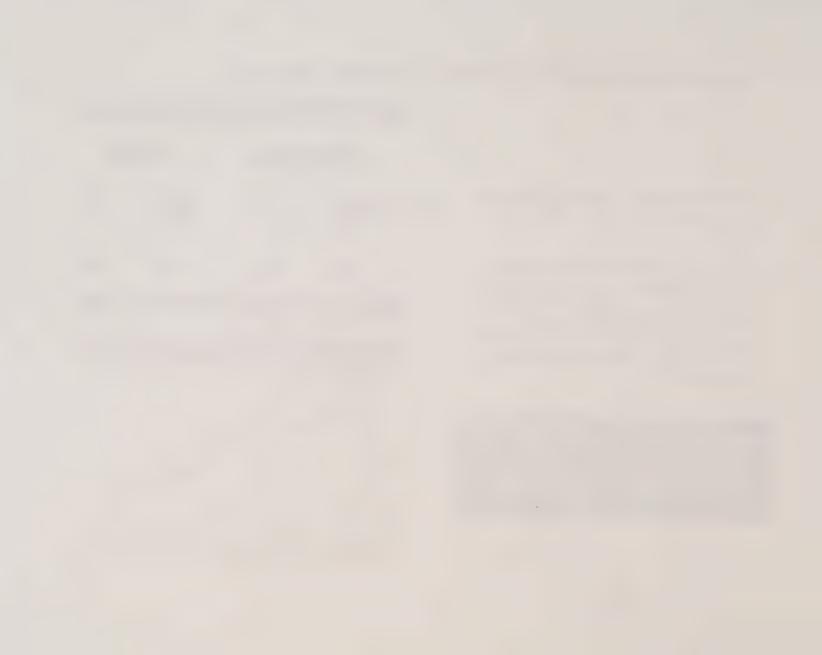
#### ...who continues to increase their Canadian investment...

Canada continues to receive a growing percentage of its foreign capital from the U.S.

While North America (Canada plus the U.S.) has in general become relatively less attractive as a location for global FDI (compared to many overseas opportunities) Canada's share within the North American context has also been declining.

Canada's future success will depend on attracting FDI, and a key concern is how Canada might reverse its position as a relatively less attractive location than the U.S. for FDI.





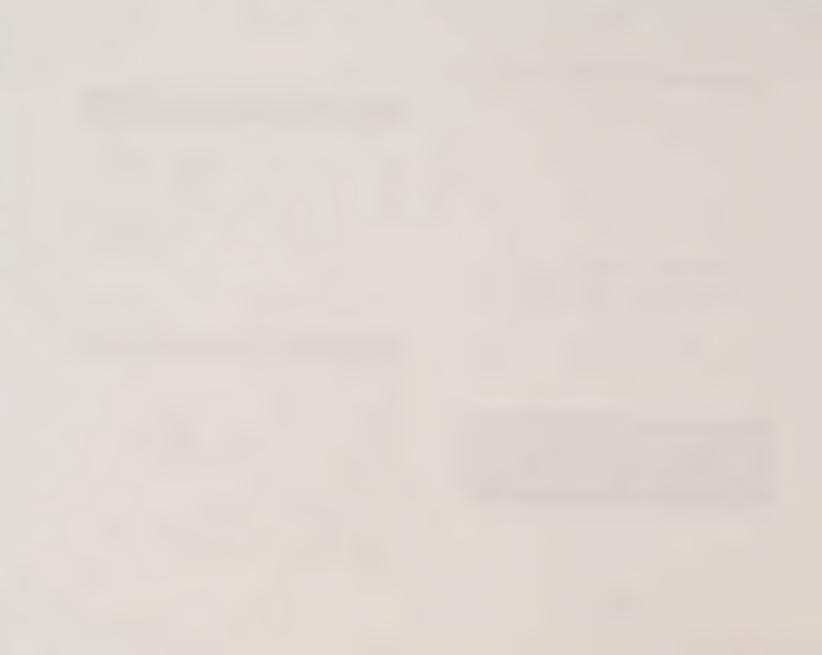
### ...especially in terms of FDI

The accumulated "value" of U.S. FDI continues to rise, outweighing the stock of Canadian direct investment in the U.S.

U.S. FDI allows Canadian firms to undertake additional R&D, expand their production capacity, introduce new, more competitive products, and create more jobs.

#### Canada's inward and outward FDI stock \$ Billion 140 Canada's Inward FDI 120 Stock from 100 U.S. 80 Canada's 60 Outward FDI Stock to U.S. 40 20 80 98





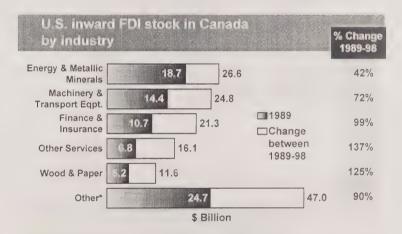
## Indeed, FDI from the U.S. is playing a crucial role...

U.S. FDI is relatively larger in energy and mining, as well as in Machinery & Transportation Equipment.

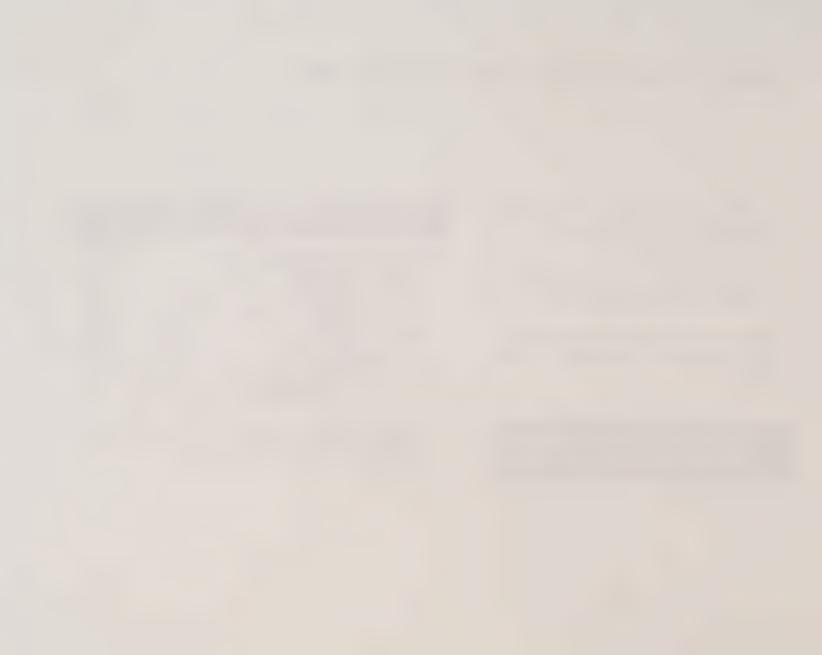
It is increasing fast in Services activities, including in Finance & Insurance.

Between 1989 and 1998, there has also been a jump in U.S. FDI going into Wood & Paper.

Services industries, too, are attracting an increasing share of U.S. FDI.



\* Includes Food & Beverage; Chemicals & Textiles; Electrical & Electronics; Construction; Communications
Source: Statistics Canada

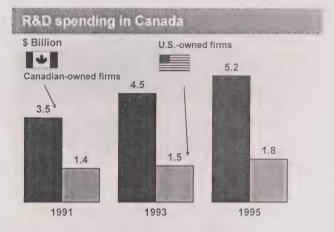


## ...including to help develop "knowledge" in Canada

U.S. firms finance and perform substantial R&D in Canada — over 23% of total Canadian business sector R&D in 1995 was performed by U.S.-owned firms/affiliates.

- In 1995, U.S. R&D spending in Canada increased by 18.7% — to almost \$1.8 billion.
- This R&D spending was concentrated in industries such as Wholesale Trade, Chemicals and Computer Services.

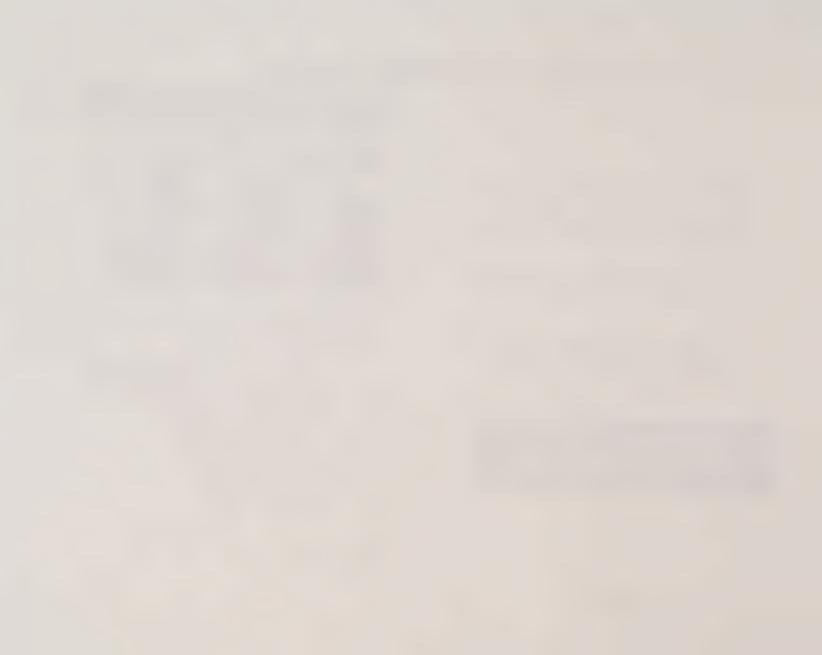
The essence of a KBE is that competition is, first and foremost, competition to innovate. But the costs of innovation are high.



Distribution of U.S.-owned firms performing R&D in Canada, 1995



Note: Industries shown if number of firms accounts for at least 5% Source: Statistics Canada



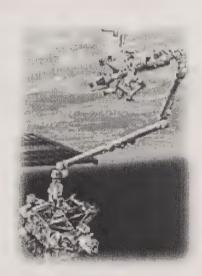
#### ...and collaborative activities

There are strong R&D links between Canada and the U.S. In fact, there are well over 100 distinct Canada-U.S. arrangements that oversee nearly 500 collaborative research ventures.

Plus there are thousands of formal and informal arrangements among companies, universities and other institutions, individual researchers, etc. on both sides of the border.

These collaborative activities allow firms to acquire technology, keep abreast of technological developments, and use specialized skills available in each country.

Canadian and U.S. firms that sponsor research in each other's country can draw on the pool of skilled people and technology in the respective countries, and get earlier access to new ideas. Canada is involved with helping to build the International Space Station.
Canada will contribute a highly advanced version of the Canadarm—the Mobile Servicing System.





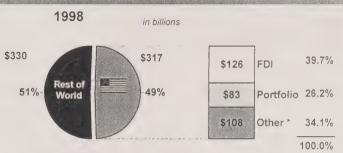
## We are also investing more in the U.S. ...

About half of Canada's foreign investment position is in the U.S. A substantial part of this (almost 40%) is in the form of FDI.

In 1998, our FDI grew twice as fast as foreign and U.S. FDI in Canada.

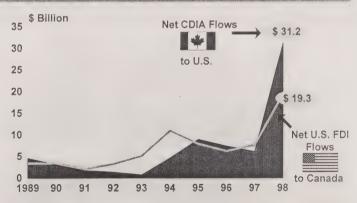
Making Canada the location of choice for investment in North America? In 1998, Canadians put in much more direct investment into the U.S. than U.S. investors did into Canada.

#### Canadian investment position abroad



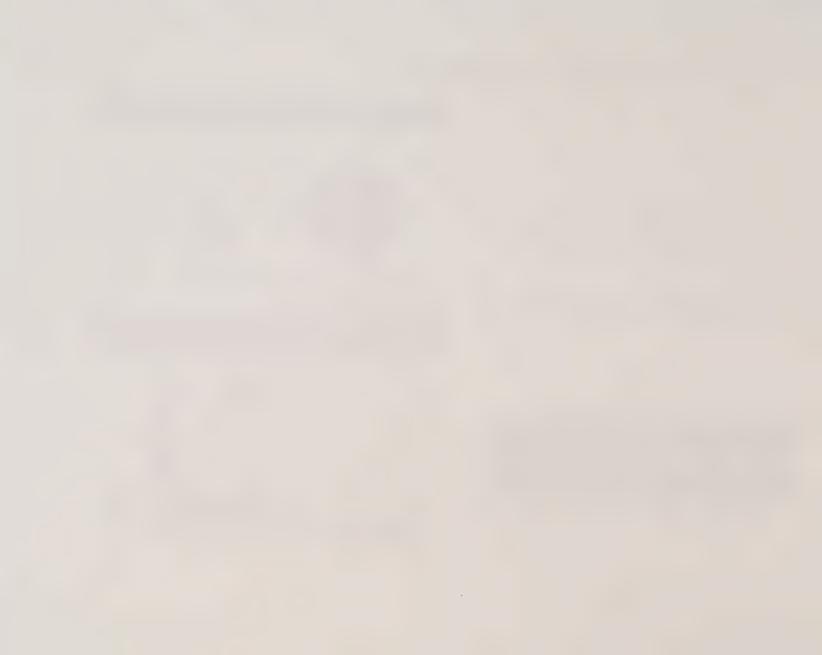
\* Other investment includes loans & allowances, deposits, official international reserves, and other assets Source: Statistics Canada

## Net U.S. FDI flows to Canada and net CDIA flows to the U.S.



Source: Statistics Canada

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## ...including plant and equipment in key areas...

Canadian companies are more than doubling their investments in key areas of the U.S. economy.

This includes expanding significantly their operations in Pharmaceuticals as well as in Business Services.

Property, plant and equipment are growing fastest in the North-east, the Heartland of the mid-west, the South-east, and in Nevada, Idaho and Washington.

Property, plant and equipment expenditures in the U.S. by Canadian companies

	<b>1989</b> (\$ Mi	<b>1996</b>	Annual Growth Rate
Drugs	2	28	46%
Electrical components	2	5	14%
Electrical goods	2	5	14%
Business services	41	112	15%
Accounting, research and management	8	41	26%
Computer and data processing	19	96	26%

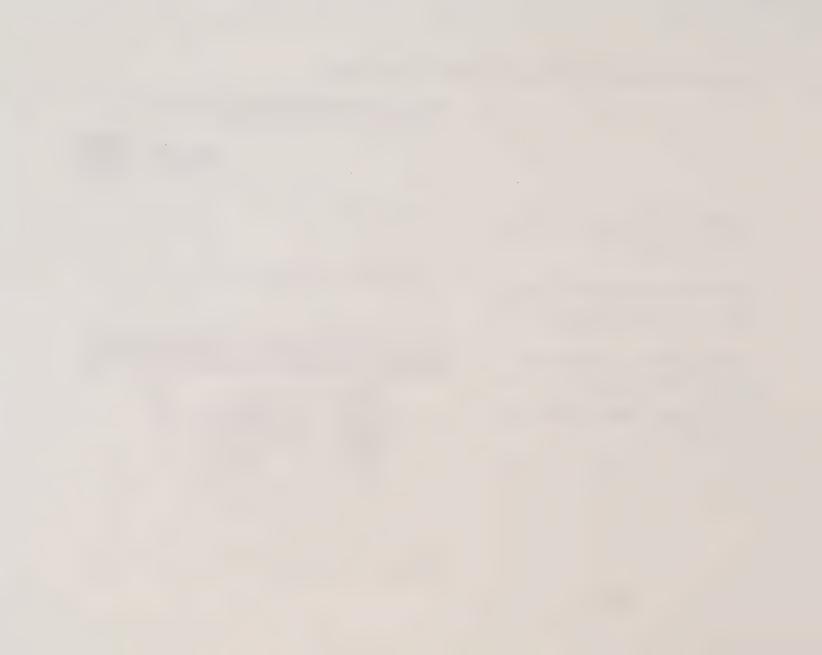
Source: U.S. Dept. of Commerce

Average annual growth of plant, property and equipment of Canadian companies in the U.S., 1989-96



Source: Industry Canada compilations based on U.S. Dept. of Commerce data

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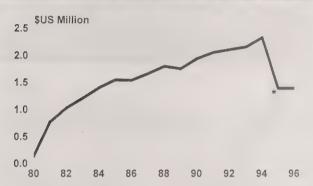
#### ...and R&D...

## Canadian companies are also setting up R&D facilities in the U.S.

 While R&D leads to the creation of new technologies, investment is the main vehicle through which these technologies become incorporated in the productive process.

The integration of the North American economy has given rise to an emerging R&D infrastructure. Companies on either side of the border draw on the resources of both countries to aid in product and process innovation. This gives each economy an important international edge.

#### R&D spending by Canadian affiliates in the U

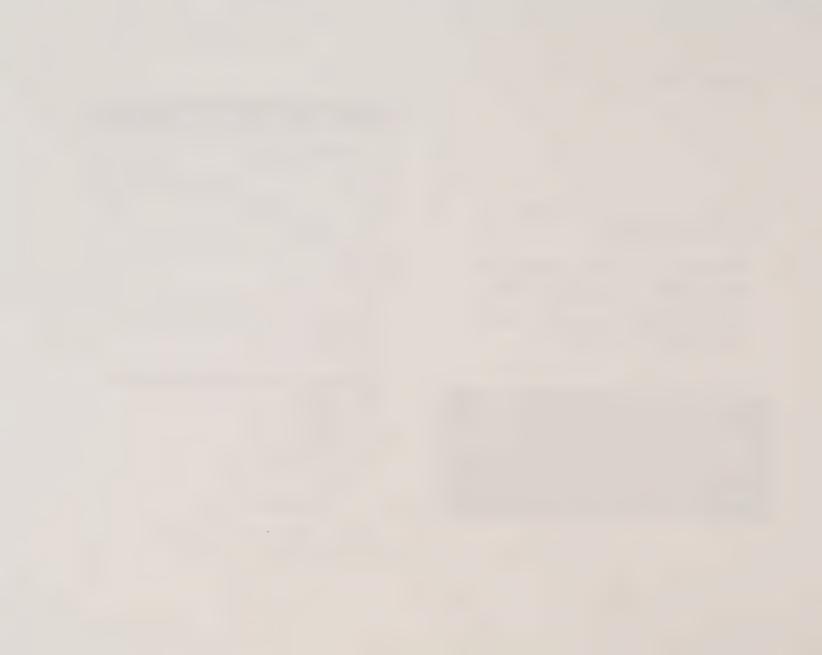


\* Decline in 1995 reflects sale of an equity position in a large U.S. chemical company Source: U.S. Dept. of Commerce

## Canadian company R&D facilities in U.S., 1996

Computers	5
Software	2
Telecommunications	7
HDTV, Other Electronics	1
Chemicals, Rubber	4
Metals	2
Machinery	1
Instrumentation, Medical Devices	2
Food, Consumer Goods	4

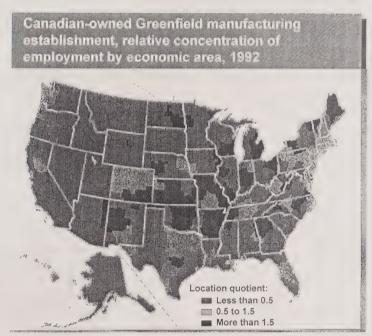
Source: D.H. Dalton and M.G. Serapio, Jr., *Globalizing Industrial Research and Development* (Washington, DC: U.S. Department of Commerce, Technology Administration, 1998).



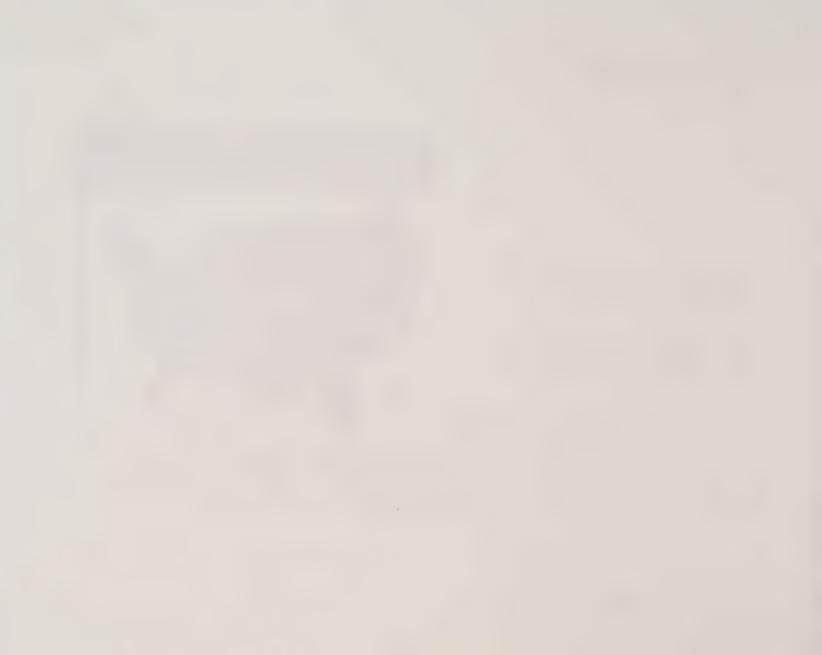
#### ...and "Greenfields"

Canadian companies are continuing to set up newly-built or "greenfield establishments" in the U.S.

They are centred in the mid-south, in areas spanning the Mississippi River and a number of states in the plains.



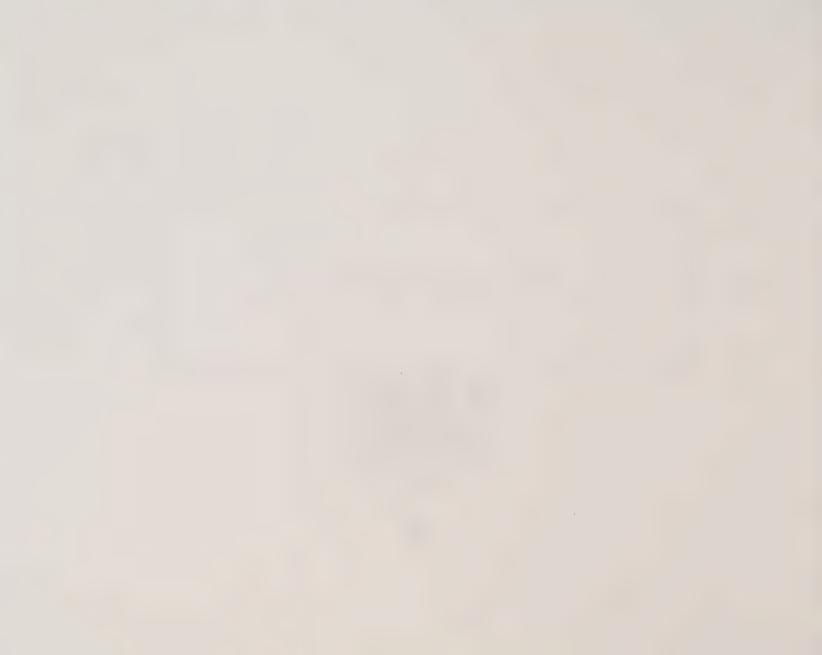
Note: The location quotient for an economic area is calculated as Canadian-owned establishments' share of employment in the areas greenfield manufacturing establishments divided by Canadian-owned establishments' share of employment in the nation's greenfield manufacturing establishments. Source: U.S. Dept. of Commerce, "Survey of Current Business", May 1999



## Other commercial links







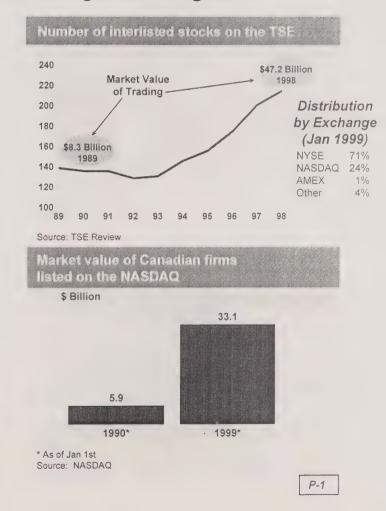
### Our capital/financial markets are becoming more integrated...

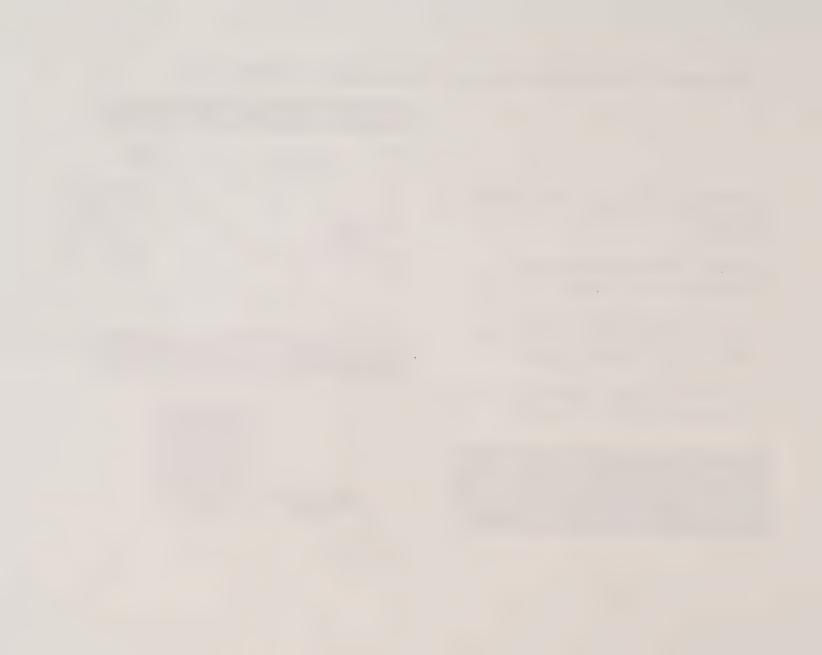
Access to pools of capital is very important to business so as to finance growth and innovation.

Canadian companies are accessing increasing amounts of capital in the U.S.

- There has been dramatic growth in cross-listing of Canadian companies on the TSE and U.S. stock markets.
- And more and more Canadian firms are looking to the NASDAQ for capital.

Increasingly, Canadian companies are finding capital in the U.S. for the initiation, expansion and modernization of business activities.





## We are also witnessing a rise in mergers & acquisitions...

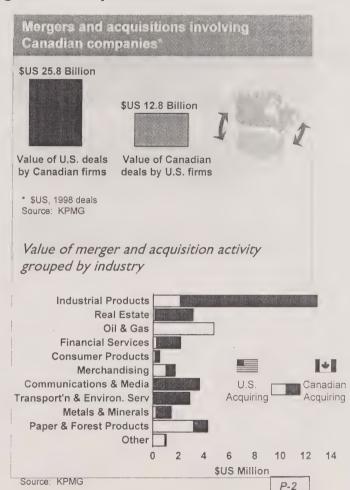
Canadian-based firms are active players in the globalization of business. They have been busy in the recent global merger and acquisition boom.

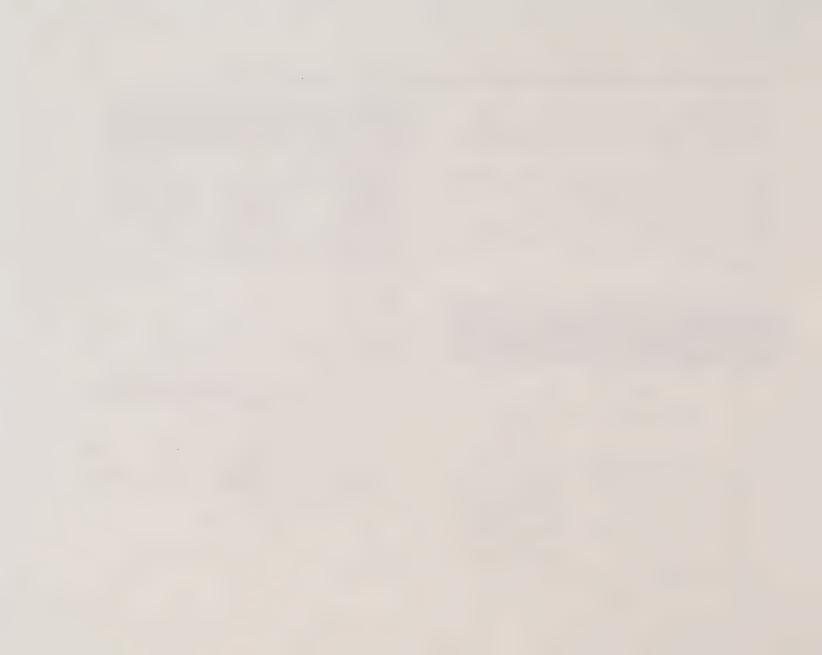
Many mergers involve companies seeking greater economies of scale. New technologies are permitting the rapid transfer of critical information, enabling companies to invest in a wider range of ventures — around North America and the world.

Top 10 acquisitions of U.Sbased co	ompanies
by Canadians announced during 19	98

alue (*Estimate \$ Billion	) Acquiror (Canada)	Target (U.S.)	
\$9.9	Northern Telecom Ltd.	Bay Networks Inc	
\$4.6	Teleglobe Inc.	Excel Communications	
\$3.3	Canadian National Railway Co.	Illinois Central Corp	
\$1.7	Placer Dome Inc.	Getchell Gold Corp	
\$1.3	Fairfax Financial Holdings Ltd.	TIG Holdings Inc.	
\$0.9	Brookfield Properties Corp.	World Financial Properties	
\$0.8	Trizec Hahn Corp	Real estate portfolio (U.S.)	
\$0.7	Laidlaw Inc.	Equitable Cos. Inc Greyhound Lines Inc.	
\$0.7	Fairfax Financial Holdings Ltd	Crum & Forster Holdings Inc.	
\$0.6	Donohue Inc.	Paper mill Champion International Corp.	

Source: Mergers and Acquisitions in Canada, 1998 Annual Directory





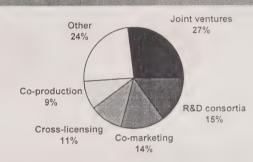
### ...and other cross-border corporate ties

We are also witnessing a rise in new relationships, including more joint corporate ventures and cross-relationships:

- To gain access to technologies and talent.
- To co-operate in costly R&D and innovation.
- To access supplier arrangements.

In the pursuit of new markets, businesses are looking at the benefits of close corporate ties with companies already in the market.

#### Strategic alliances

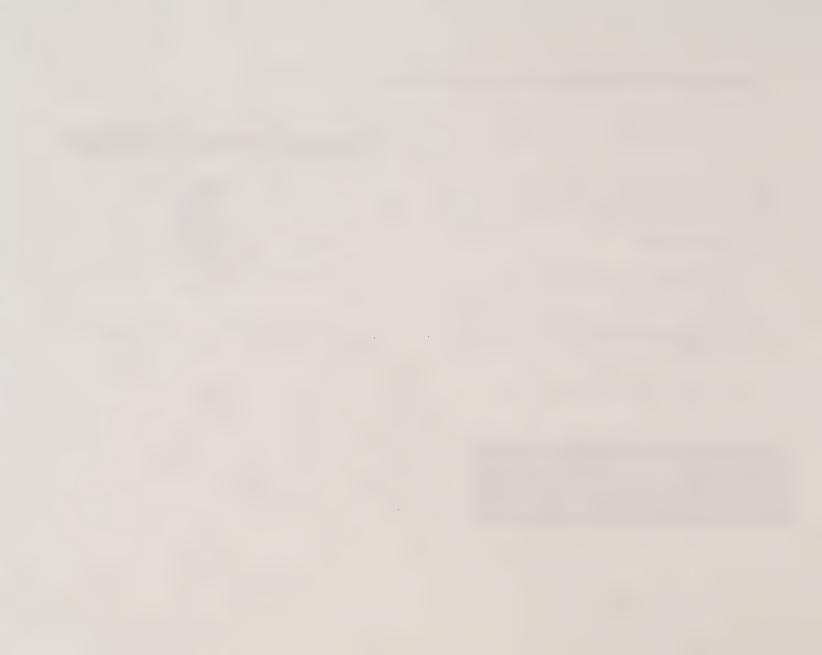


Source: Sunder Magun, "The Development of Strategic Alliances in Canadian Industries: A Micro Analysis", Industry Canada, 1998

global

supplierrelationships

joint ventures



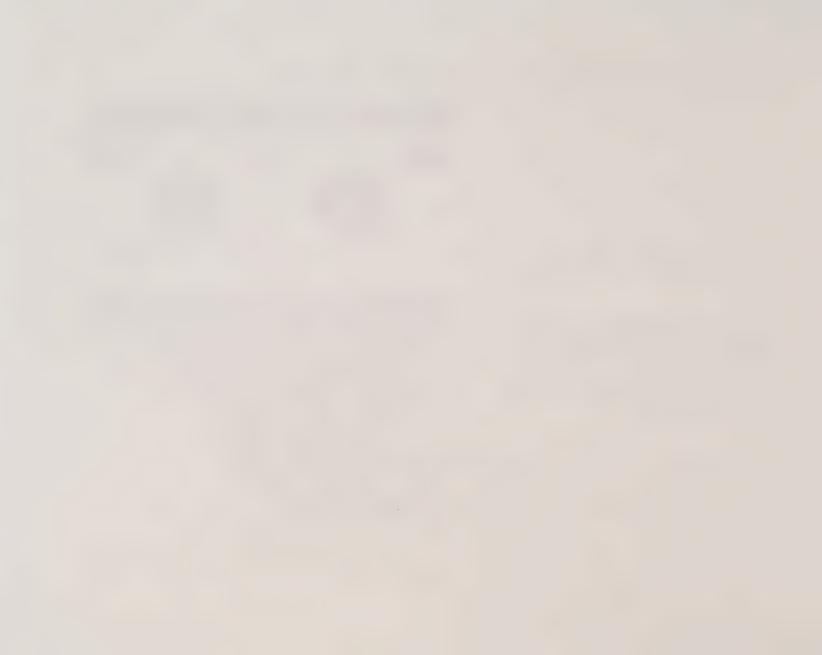
## In some areas, U.S. foreign ownership is edging up

The share of foreign-controlled corporate operating revenues is still rising.

Key industries include Transportation Equipment, Electrical & Electronics, Chemicals & Textiles and Consumer & Business Financing, which are integral to the well-being and future prosperity of other industries.



Source: Industry Canada compilations based on Statistics Canada data



## We are also playing a strategic role in IP activity...

# U.S. firms have a surplus over Canadian firms in the exchange of intellectual property.

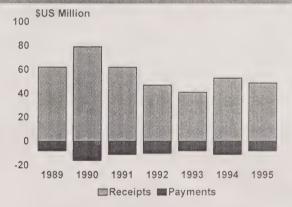
 In 1995, U.S. receipts from technology licensing transactions with Canada were over 6 times higher than payments made by U.S. firms to Canada.

## Top 10 Canadian organizations with U.S. patents, 1994-98

1	Individuals	4,077
2	Northern Telecom Ltd.	335
3	XEROX Corporation	317
4	National Research Council of Canada	119
5	University of British Columbia	115
6	IBM Corporation	95
7	Merck Frosst Canada, Inc.	72
8	Mitel Corporation	67
9	Telefonaktiebolaget LM Ericsson	60
10	Exxon Research & Engineering Co.	56
	Hydro-Quebec	56
	Total Granted to Canada	11,698

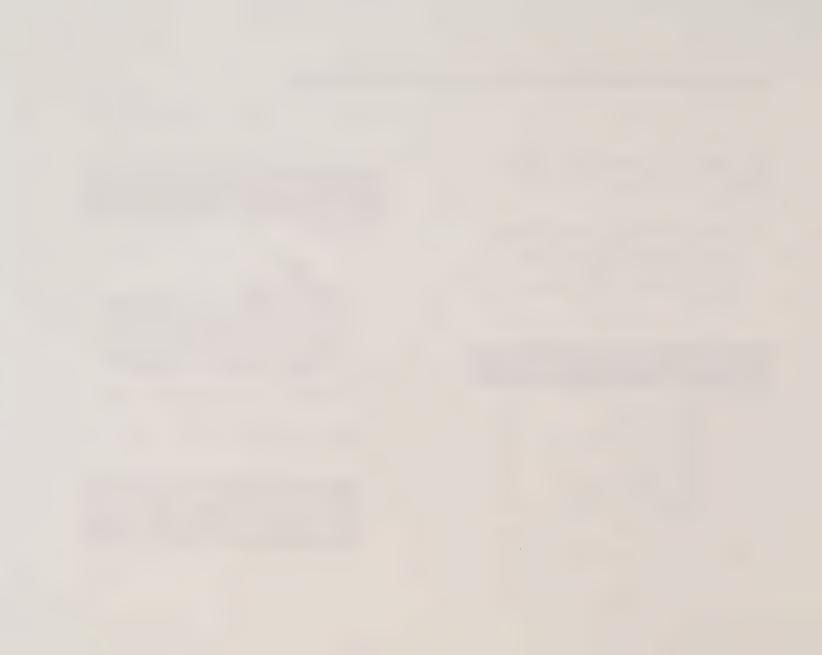
Source: U.S. Patent and Trademark Office

# U.S. royalties and fees generated from the exchange of industrial processes\* between unaffiliated companies



\* Patents and other proprietary inventions and technologies Source: U.S. National Science Foundation

Investing in each other's future

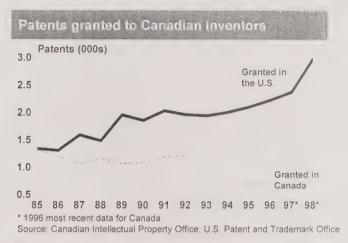


## ...and cross-border patent activity is increasing

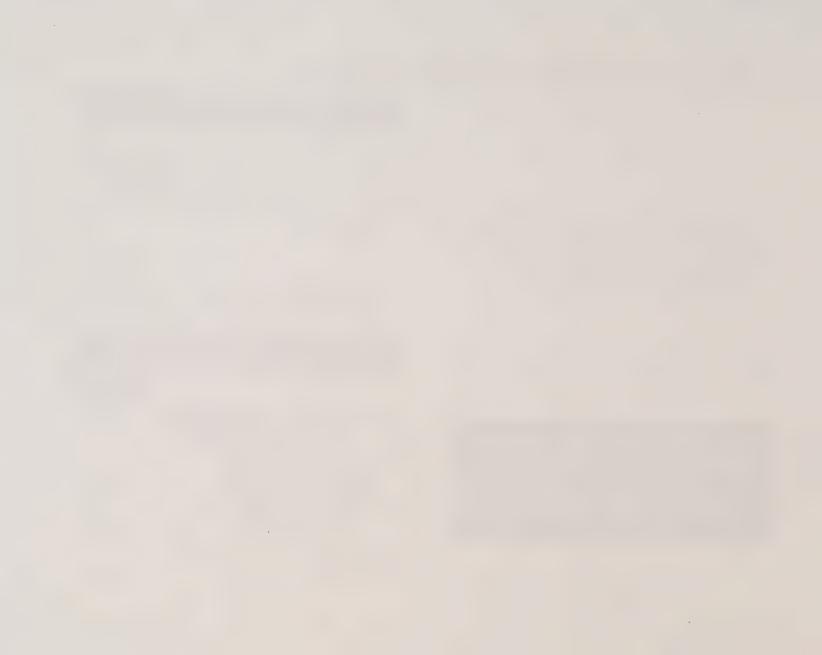
Canada still receives the largest share of its foreign patents from American investors, and the U.S. receives the largest share of foreign patents from Canadians (however, each has been falling over time).

An important measure of innovation and increasing economic relations between the two nations is cross-patenting.

While R&D pertains to the input side of the innovative process, patents focus on innovative outputs.







# Our "new economy infrastructure" is growing...

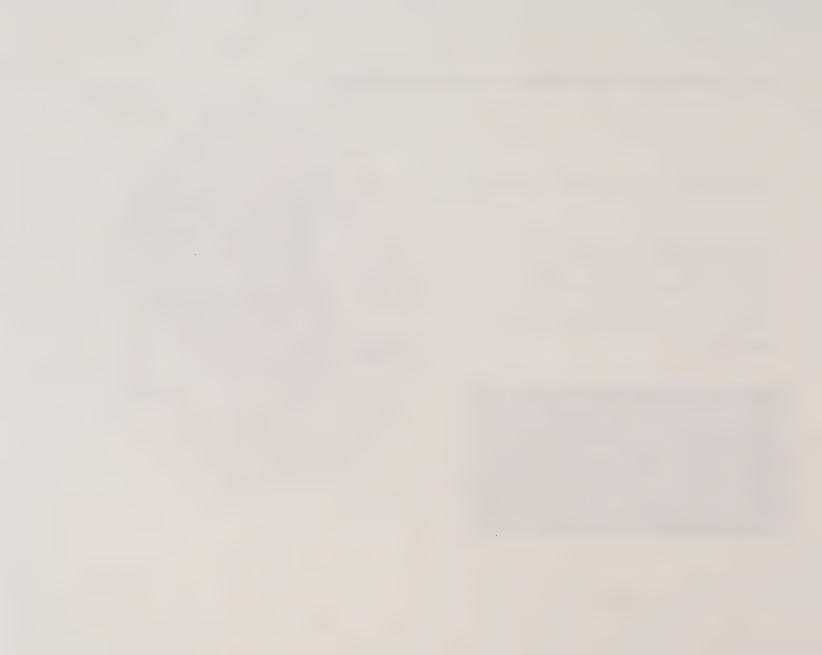
The Internet has done wonders for making the world a "smaller" place.

Businesspeople can locate and read economic reports electronically from around Canada and the U.S. They can learn about emerging opportunities, discuss issues and "brain-storm" with colleagues and consultants thousands of miles away.

The Internet has greatly expanded the possibilities for business to:

- access information...
- learn about new developments...
- submit designs and participate in the immediate work-flow of others sitting thousands of kilometres away across the border.





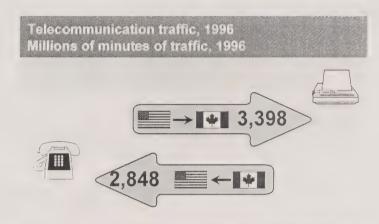
# ...and continues to bring us closer together

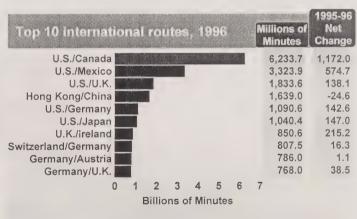
The busiest telecommunications traffic in the world is between Canada and the U.S.

- In 1996, there were 6 billion minutes of traffic.
- And the growth rate is double that of other international routes.

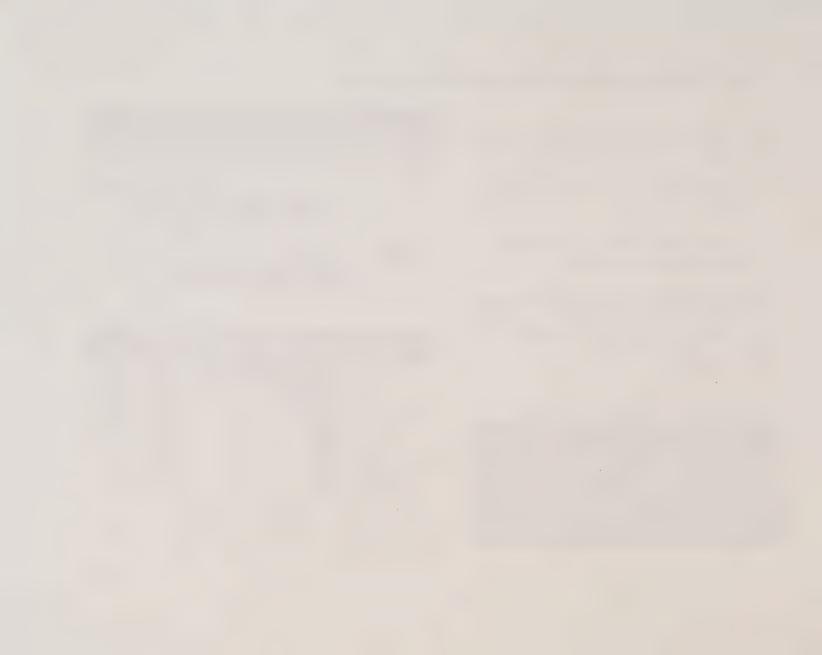
And information technology/infrastructure is continually being improved — especially in the area of technical business links (faxes, 1-800/888/900-calls, web-addresses)

A prerequisite for a successful knowledge-based economy is a well-developed information infrastructure. As we enter into the 21st century, information infrastructure is becoming as important as transportation infrastructure was at the beginning of the 20th century.





Source: TeleGeography, Inc.



# Movement of people

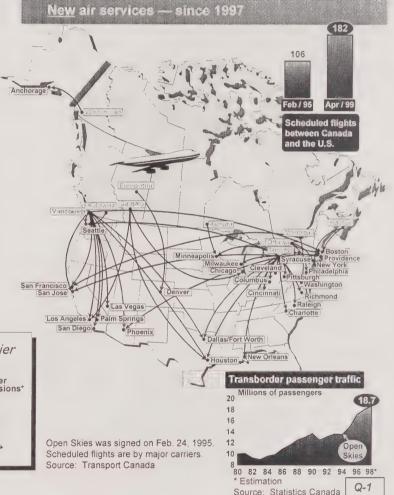




# Stronger transportation links are being forged

# Transborder air services continue to improve:

 With 47 new air-links created in 1997 and 1998, transborder passenger traffic has increased rapidly over the past few years.



Business travel to and from the U.S. is being made easier

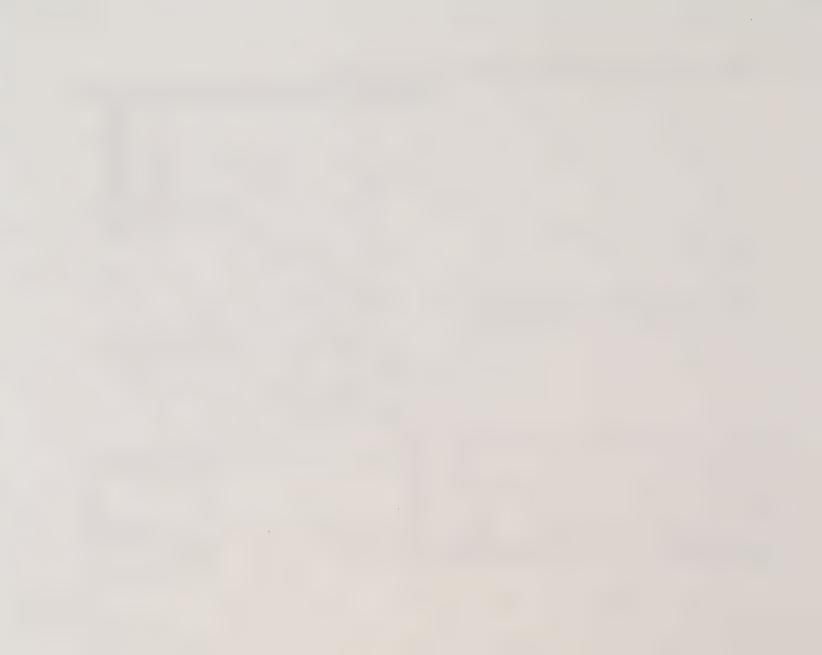
 Scheduled Air Services

 Vancouver Calgary
 Toronto
 Ottawa
 Montreal
 Halifax
 Other Conversions\*

 Feb / 95
 16
 9
 37
 7
 17
 2
 18
 30

 Dec / 98
 35
 14
 66
 12
 23
 5
 20
 8

\* Charter services operated by Air Canada and Canadian Airlines prior to Feb / 95 that were later converted to scheduled flights. Source: Transport Canada



# They include "deeper" transportation links...

There are many "trade corridors" — many actively promoted by municipal authorities, businesses and trade-related organizations on both sides of the border.

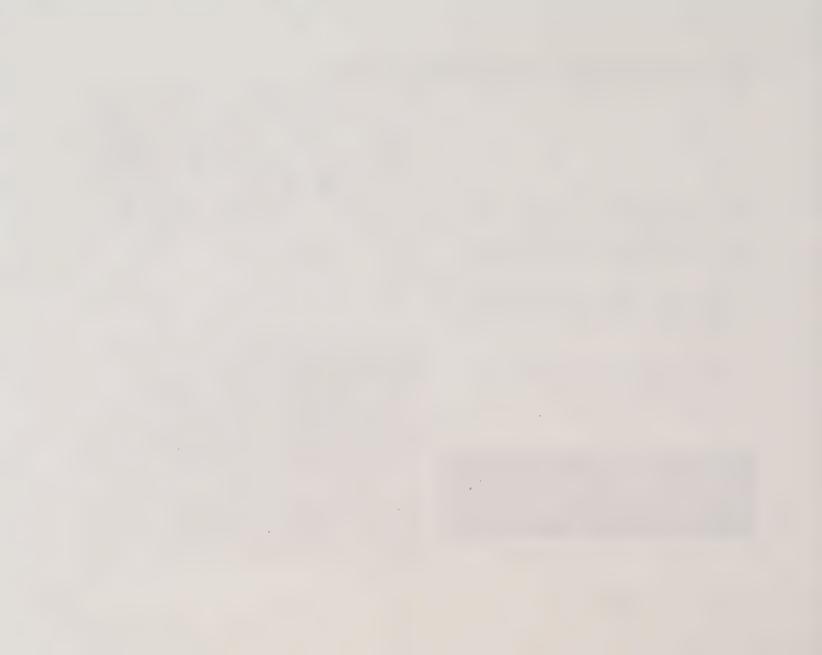
- They promote trade, advertise travel advantages and seek ways to facilitate travel flow.
- They act to ease the transport of goods and services "deeper" into the U.S. market and beyond.

Canada's transportation infrastructure is already well-connected to that of the U.S.



#### Select Transborder Highway Corridors

B.C. to San Diego (via I-5)
Alberta to San Diego (via I-15)
Alberta to El Paso (I-15/25)
Man./Sask. to Brownsville (via US 83)
Winnipeg to Laredo (via I-29/35)
Winnipeg/Thunder Bay to Laredo (via I-35)
Winnipeg to Detroit to Sarnia (via I-94)
Winnipeg to New York (via I-80)
Sault Ste. Marie to Fort Lauderdale (via I-75)
Sarnia to Laredo (via I-69)
Ontario (Fort Erie) to Miami (via US-219)
Ontario (Fort Erie) to Boston (via I-90)
Quebec to New York (via I-87)
Quebec to Boston (via I-91/93)
New Brunswick to Miami (via I-95)



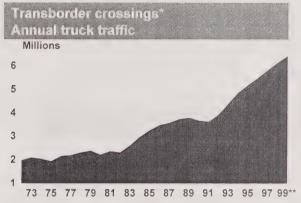
#### ...that are also more "active" links...

Cross-border truck flows have been particularly strong.

- Since 1991, they have increased some 78%, to nearly 17,500 vehicles per day.

Our rail exports to the U.S. have also shot up since 1991, reflecting increased demand for heavy commodities.

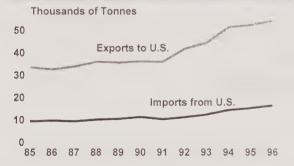
The nature of Canada's exports such as forest products, fertilizer materials and grains has made rail a more expedient form of transportation.



\* U.S. trucks entering and Canadian trucks returning.

\*\* Numbers are based on figures for the first quarter of 1999. Source: Statistics Canada

#### Canada/U.S. rall exports and imports



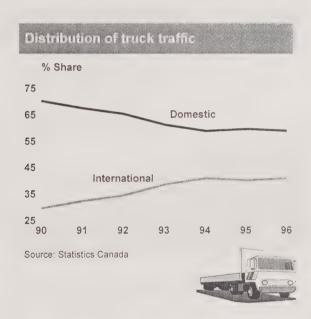
Source: Statistics Canada, Cat. 52-216 for the period 1987 to 1995; Transport Canada

# ...and reflect the shifting pattern of economic activity

The relative traffic share between domestic and international markets has been dramatically shifting.

#### **Technology to improve speed:**

A conceptual design for an Intelligent
Transportation Border Crossing System is
being tested at the Peace Bridge between
Ontario and New York and the Ambassador
Bridge between Ontario and Michigan.
This could allow Customs and Immigration
pre-clearance and facilitate vehicle and
driver inspection.





# Business people are much more "cross-border mobile"...

Since 1989, the number of Canadians entering the U.S. on a temporary basis has been rising — from about 25,000 in 1989 to over 40,000 in 1996.

Under the FTA and subsequently NAFTA, entry requirements to the U.S. eased substantially\*, allowing for increased entry as well as substitution out of more stringent temporary visa categories.

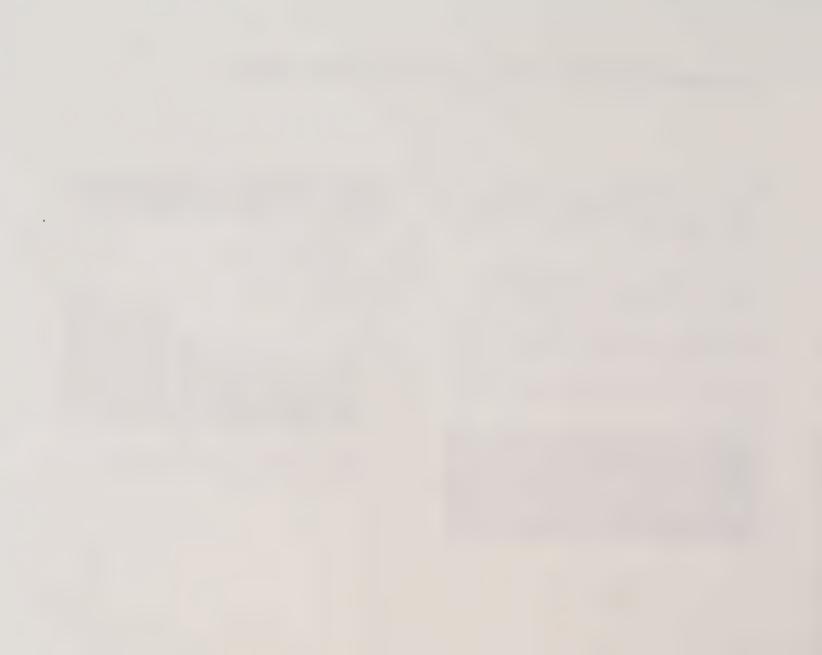
\* Under NAFTA, U.S. work visas are open to virtually anybody with a university education and some work experience.

Compared as a proportion of the population with university education, the emigration of skilled workers roughly doubled between the 1960s and 1996 and tripled by 1997.

#### Number of Entries to the U.S. of Canadians with Temporary Visas' Admissions (Thousands) Type of Temporary Visa Intracompany transfers (L1) ☐Other temporary (H2B) Professional workers (H1B) FTA/NAFTA workers (TC,TN) 30 20 10 89 90 91 92 93 94 95 96

\* The data include initial entries to the U.S., as well as renewals and re-issue of temporary visas which expire when the holder has been outside the U.S. for more than 30 days.

Source: U.S. Immigration & Naturalization Service



# ...as are others for pleasure and study

The top destination for Canadian tourists is next door. For the first time since 1987, more American tourists visited Canada than Canadians to the U.S.

More students are studying cross-border. About 22,051 Canadian students are studying in U.S. colleges and universities, many pursuing graduate degrees. There were about 3,314 U.S. students studying in Canada.

Many thousands of Canadians make the U.S. home for part of their year — enjoying their retirement years, and spending the winter months in the U.S.

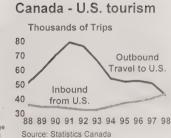
Each year, many Canadians and Americans make a permanent switch in residency.

Increased tourism helps citizens with first-hand familiarity, which helps build even stronger bridges between the two countries.



Source: Association of Universities and Colleges of

Canada



Q-6

2,410 20.8% 409 3.5% 4.4% 1,664 14.3% 1,728 14.9% 2,908 25.0%

Source: U.S. Immigration & Naturalization Service



# Concluding notes





# Our links are truly strong and growing...

ur economic links with the U.S. are strong and getting stronger. They are developing quickly not only in trade and investment, but as well in many new dimensions, such as in cross-border R&D spending and collaboration. In many ways, these new links are in response to the forces of rapid globalization, the information revolution, and the transition by all countries towards more knowledge-based activities.

As we strive to position ourselves for the future, it is paramount that Canada more fully seize opportunities in the U.S. — in traditional areas such as resources, but as well in other areas that could provide us sustainably higher prosperity. Our growth as a KBE is dependent on the exploitation of opportunities afforded by our closer economic relations. This entails developing competitive advantages that could lead to a brighter and more promising future.

In the next issue of the Micro-Economic Monitor, we will feature Part 2 — Opportunities and Challenges. In Part 2, we will identify the key benefits to our close economic relations, as well as opportunities, which if taken advantage of, will help position us for the future.

...but we still need to capitalize on our opportunities



#### For Further Information

We welcome your questions, comments and suggestions? You can reach us by ...

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or faxing us at:

(613) 941-3859

The Micro-Economic Monitor is prepared on a quarterly basis by the Micro-Economic Analysis Directorate of Industry Canada. The Monitor provides a guick and easy-to-read update on Canada's economic performance. It also provides topical in-depth reports on current economic issues from a micro-economic perspective.

The current analysis update was prepared by Joseph Macaluso, Alison McDermott, and Karen Smith, under the direction of Shane Williamson.

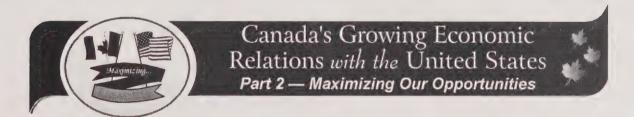
This quarter's feature was prepared by Gary Sawchuk, Aaron Sydor and Cemile Sancak. It benefitted from comments and suggestions from Ram Acharya, Dan Ciuriak, Shenjie Chen and Coronel Clea from the Department of Foreign Affairs and International Trade. Presentation / data assistance was provided by Caroline Farmer, Ashfaq Ahmad, Jennifer Brill, Gillian Elias, Wulong Gu, Jennifer Kennedy, Shauna Martin, Khamlay Pung, Karen Smith, Patrick Taylor and Lori Whewell. Proof-reading by Dave Dupuis, Shane Williamson and Someshwar Rao. Translation by Lucie Larocque and production support by Cliff Lee-Sing and Sue Hopf. Gary Sawchuk is the General Editor of the Special Features in the Micro-Economic Monitor (and is responsible for all remaining errors). lage Mideau

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# Micro-Economic Onitor

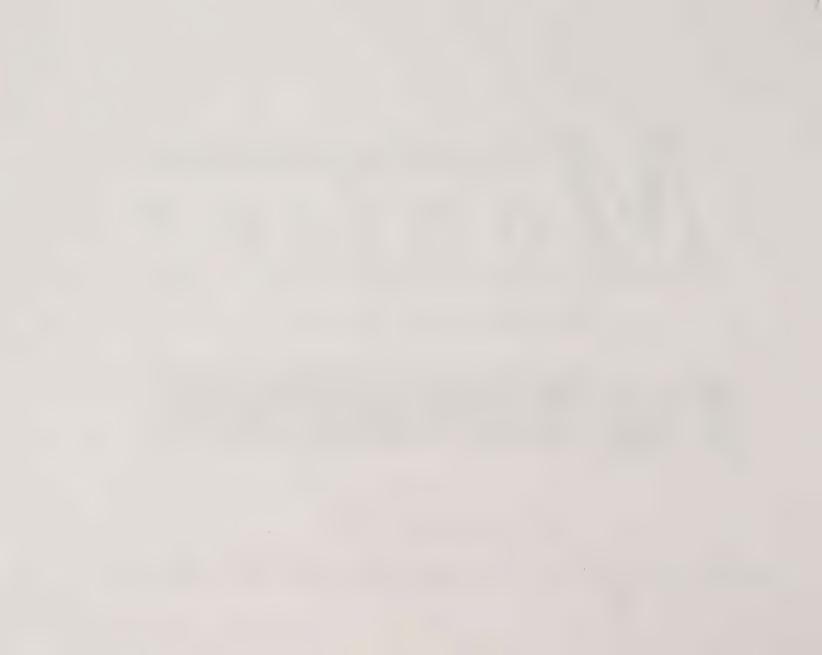
With the special report:



Third Quarter, 1999

Micro-Economic Analysis Directorate, Industry & Science Policy Sector, Industry Canada.

This document is also available on the Internet at http://strategis.ic.gc.ca/sc\_ecnmy/mera/engdoc/04.html



# **Table of Contents**

Overview											Α
Domestic	Scene										
Real	<b>Economic Act</b>	ivity .									В
	me Side										
	Movements										
Labo	our Situation										E
	ncial Variables										
	al Track										
	petitiveness										
	national Accou										
	oral Overview										
Special F	eature:										
•	Growing Eco	nomi	c Re	lati	ons	wi	th t	he	Un	ite	d States
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	ortunities for th										
	can we take be		_								141
1104	opportunities			_							N
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Anne	ex — Opportun	illes all	u U.	J. K	zyIV.	113					



Overview

# The economy picks up steam in the third quarter of 1999...

Output expanded a stronger-than-expected 4.7% (annual rate) in the third quarter, boosted by a surge in exports and strong consumer spending.

- Exports increased at their fastest rate in two years, fuelled in particular by higher sales to the U.S. market. Consumer spending also posted a strong gain in the third quarter.
- Investment in M&E edged down after an exceptionally large gain in the second quarter, but non-residential investment remained strong. Demand for housing slowed from its fast pace in the first half of the year, and businesses cut back on inventory investment.

### ...with job growth rebounding from a weak first half

After a slow start to the year, the pace of job creation has picked up sharply since September. Gains have been concentrated in full-time positions, with the Manufacturing sector accounting for one out of every two new jobs so far this year. Strong job growth has lowered Canada's unemployment rate to 6.9% in November, an 18-year low.

The outlook for the Canadian economy has improved considerably in recent months. The latest consensus forecast projects growth of 3.8% overall in 1999, nearly double the forecast of just over 2% growth made early in the year.

This issue's special report is the second instalment of a three-part study on Canada's strong and growing economic relations with the U.S. Part 1, released with the second quarter issue of the Monitor, provided a snapshot of the key economic linkages between the two countries. Part 2, contained in this issue, examines how we might better take advantage of economic opportunities in the U.S. Part 3 will identify key challenges facing Canada in pursuit of these opportunities.



**Domestic Scene** 

Real Economic Activity

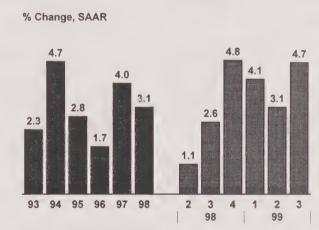
# The economy gathers strength in the third quarter...

Real GDP rose a stronger-than-expected 4.7% (annual rate) in the third quarter of 1999.

- Higher exports led the advance, which was also supported by healthy growth in consumer spending.
- Business investment edged lower following a sizeable increase in the previous period.

Output over the first three quarters of 1999 is up 3.6% compared to the same period last year. The current consensus forecast calls for growth of 3.8% for all of 1999, well above last year's pace of 3.1%.

#### Real GDP Growth





### ...fuelled by a surge in exports...

Exports of goods and services rose 15.0% (annual rate) in the third quarter, the largest advance in two years.

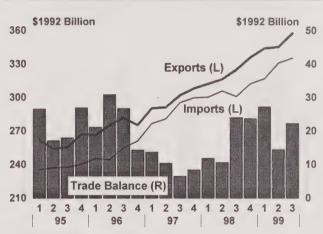
 Though most major categories were up on the quarter, growth was led by higher exports of Automotive Products, Computers, Telecommunications Equipment and Forestry Products.

Imports grew at a slower pace (5.5% annualized), although imports of Automotive Products rose strongly for the second consecutive quarter.

Surging exports resulted in a sharp increase in Canada's real trade surplus and provided a major boost to output in the third quarter.

 This contrasts with the previous quarter, when import growth exceeded export growth and the trade surplus fell.

# Real Exports and Imports of Goods & Services

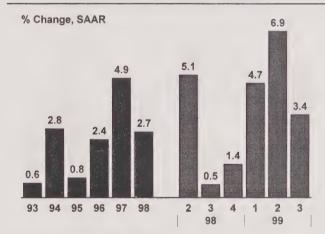


### ...and strong demand at home

Final domestic demand increased by 3.4% (annual rate) in the third quarter of 1999, building on substantial gains in the first half of the year.

 Higher domestic demand was fuelled primarily by consumer spending, as inventory investment slowed and business investment in M&E declined.

#### **Final Domestic Demand**

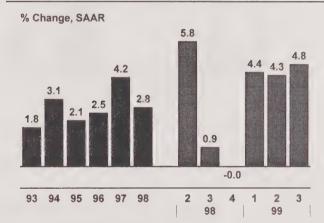


# Consumers provide the biggest boost to domestic demand...

Consumer spending rose 4.8% (annual rate) in the third quarter, marking three straight periods of growth in excess of 4%.

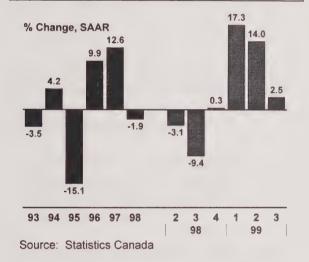
- Spending was up across all major categories. However, purchases of consumer durables were especially strong (+18.1%, annualized), boosted by a sharp rebound in sales of motor vehicles.

### Real Consumer Expenditure Growth

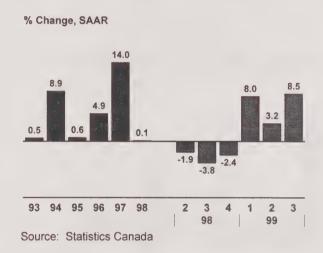


# ...but demand for housing slows...

#### **Real Residential Construction Growth**



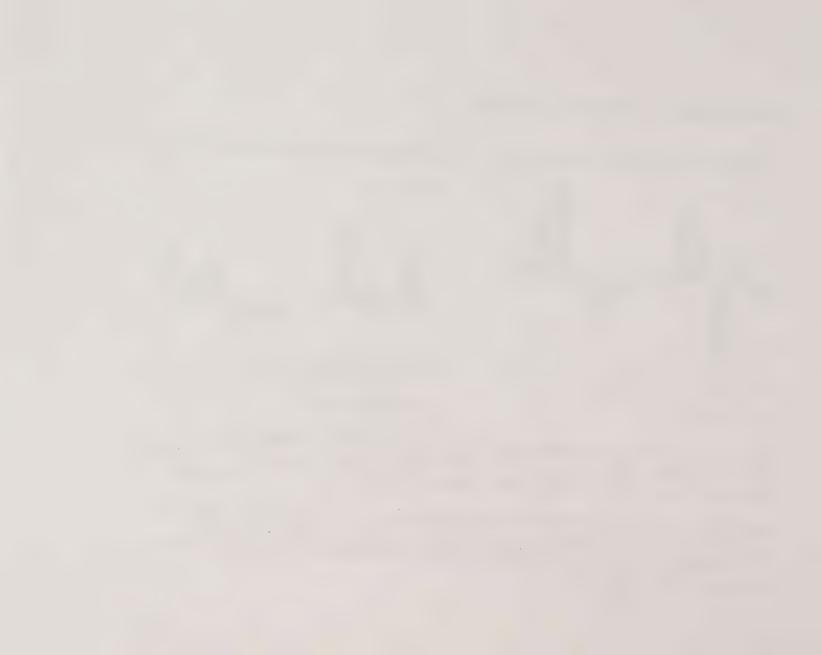
#### **Real Non-residential Construction Growth**



B-5

Investment in Housing rose 2.5% (annual rate) in the third quarter of 1999, slowing considerably from a very fast pace in the previous two quarters. Advances in new housing construction and sales of existing homes were partly offset by lower renovation activity.

Investment in non-residential building and engineering structures advanced a solid 8.5% (annual rate) in the third quarter, boosted by higher spending on both components. Non-residential construction has now increased in each of the first three quarters of 1999, shaking off a very weak 1998.



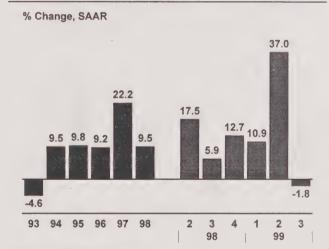
# ...business spending on M&E retreats from a very high level...

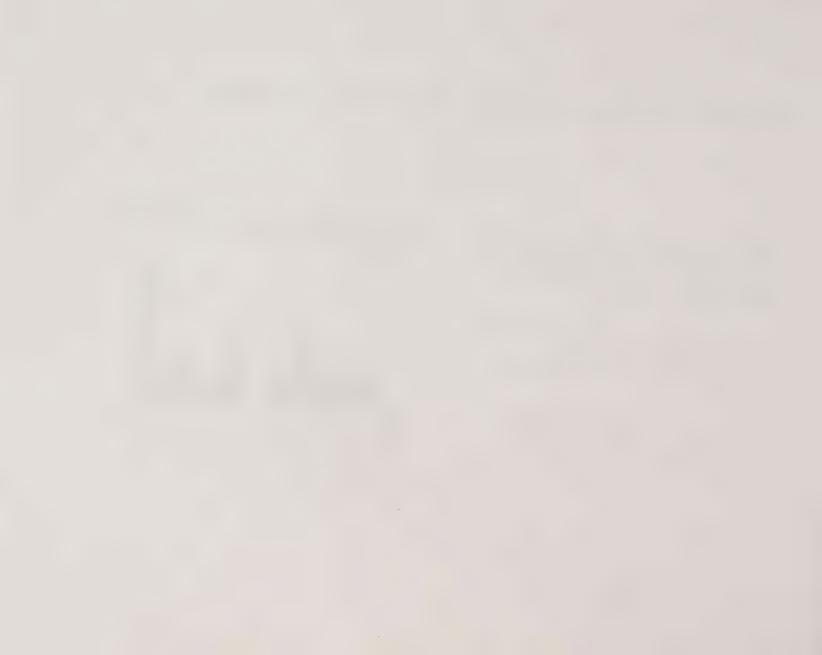
Business investment in M&E edged down 1.8% (annual rate) in the third quarter, on the heels of an exceptionally large gain of 37.0% in the second quarter.

 A sharp drop in aircraft investment and lower business spending on computers were primarily responsible for the decline.

Despite this third-quarter decline, M&E investment is up nearly 14% so far this year compared to the same period last year.

### **Real Machinery & Equipment Investment**





# ...and inventory investment is cut back

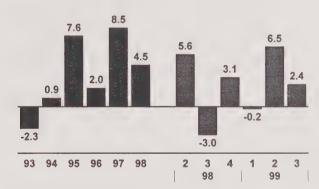
Business investment in non-farm inventories totalled \$2.4 billion in the third quarter of 1999, down sharply from the previous quarter.

 An inventory buildup in the Manufacturing sector was partly offset by a reduced inventories in Wholesale & Retail Trade.

The accumulation of farm inventories also slowed in the third quarter.

### **Non-farm Business Inventory Investment**

\$1992 Billion, SAAR





**Domestic Scene** 

Income Side

# Growth in personal income picks up...

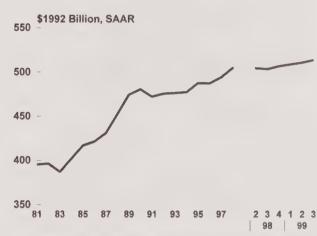
#### **Growth in Personal Income**

#### % Change, SAAR



Source: Statistics Canada

#### Real Personal Disposable Income\*



\*Converted to real dollars using the chain price index for personal expenditure on goods and services. Source: Statistics Canada and Industry Canada

Personal income rose 3.8% (annual rate) in the third quarter of 1999, outpacing growth in the previous two quarters and matching that recorded at the end of 1998.

Disposable income increased at an even faster rate (+4.8%), with income rising more quickly than income taxes and employee contributions to social insurance programs. After adjusting for inflation, personal disposable income was up 2.5% on the quarter.



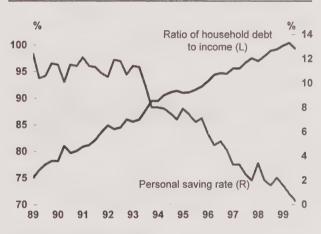
### ...but household finances fail to improve

With growth in consumer spending outpacing gains in disposable income, the saving rate fell 0.6 percentage points to 0.3% in the third quarter.

- This is the lowest saving rate on record (available data extend back to 1961).

Consumer and mortgage debt levels were roughly unchanged during the quarter. Coupled with higher incomes, this led to a reduction in the household debt-to-income ratio to 99.3%, down from a record high of 100.4% in the previous period.

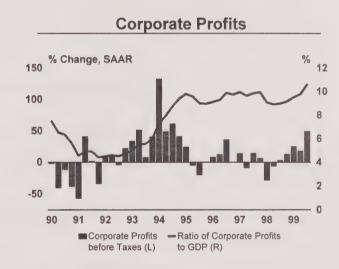
### **Personal Debt and Savings Rate**



### Corporate profits surge in the third quarter

Corporate profits jumped up by 49.6% (annual rate) in the third quarter of the year, the biggest quarterly advance since 1994.

- Profits increased to 10.6% of GDP, an eleven-year high.



**Domestic Scene** 

**Price Movements** 

### Inflation rises above 2%...

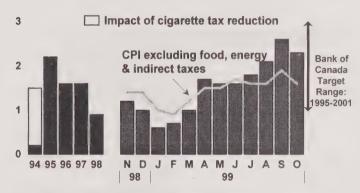
After holding steady between 1.6% and 1.8% from April to July, inflation picked up over the following three months, reaching 2.6% in September before retreating to 2.3% in October.

- This is the first time since early 1997 that inflation has risen above 2%.

The "core" inflation rate – excluding the volatile food and energy components as well as the impact of indirect taxes – was 1.6% in October, still within the bottom half of the 1-3% target range set jointly by the Bank of Canada and Department of Finance.

#### **Consumer Price Index**

Year-Over-Year % Change



Source: Statistics Canada & Bank of Canada



# ...driven up mainly by higher energy prices

Higher energy costs – notably for gasoline and natural gas – accounted for just over one-third of the year-over-year rise in the general price level in October.

- Excluding energy, the CPI was up only 1.5% on the month (compared to 2.3% if we include energy prices).

Higher prices for motor vehicles and university tuition also contributed to the year-over-year rise in consumer prices. However, lower prices for computer equipment and telephone services continued to put downward pressure on annual inflation.

#### Components of CPI: October 1999



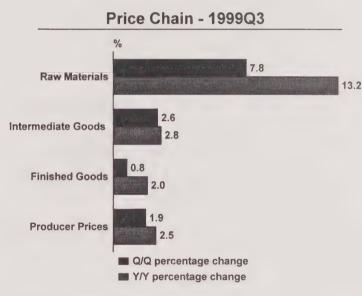
# Commodity prices rise sharply for the second straight quarter

After having increased 8.1% in the second quarter, the price of raw materials jumped up a further 7.8% in the third quarter.

Although commodity prices fell back slightly in October (-1.1%), the outlook for commodity prices remains positive.

- This recent strength is due mainly to a faster-than-expected recovery in the Asia-Pacific and a sharp rebound in the price of crude oil following production cutbacks by OPEC countries.

Industrial product prices – those received by producers at the factory gate – were up 2.5% in the third quarter on a year-over-year basis, the biggest rise in nearly four years.



**Domestic Scene** 

**Labour Situation** 

# Employment growth picks up sharply in the Fall...

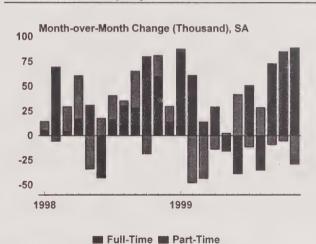
Employment growth, which had been sluggish through most of 1999, was very strong over the September-November period.

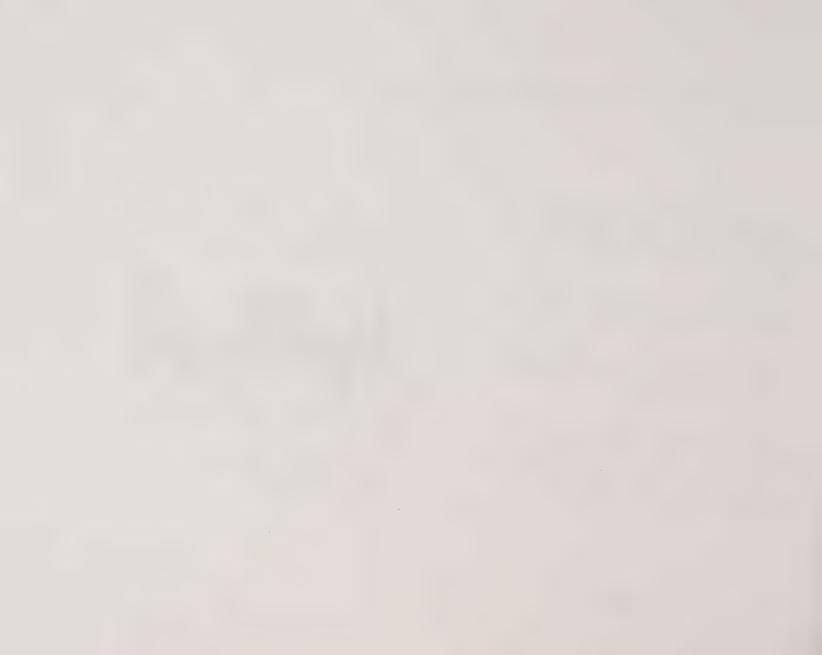
Over the first eleven months of 1999, there has been a net gain of 313,000 new jobs.

 Just under two-thirds (203,000) of these year-to-date gains have occurred over the past three months.

All of the employment growth has been in full-time work. The number of full-time positions is up 397,000 over the first eleven months of 1999, compared to a drop of 84,000 in part-time employment.

### **Employment Growth**



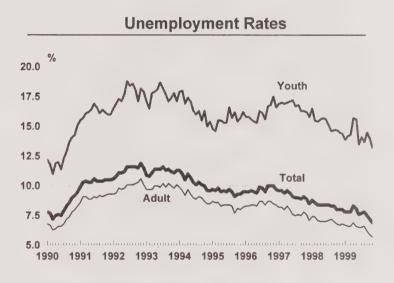


# ...dropping the unemployment rate to an 18-year low

Employment growth has greatly outpaced growth in the labour force since September, lowering the national unemployment rate to 6.9% by November.

- This is the lowest rate since August 1981, and compares to the 8.0% rate prevailing at the end of last year.

Since the beginning of 1999, the adult unemployment rate has fallen by 1.1 percentage points to 5.7%. Strong job growth has also lowered the youth unemployment rate by 1.2 points to 13.2%.

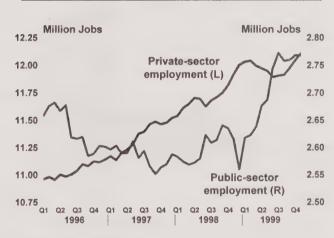


# The private sector rebounds from job losses earlier in the year...

After posting losses in the first half of the year, private-sector employment has rebounded strongly so far in the fourth quarter, growing by 60,000. Employment in the public sector has edged lower over this period.

 However, public sector employment growth has outpaced that of the private sector so far this year – 208,000 compared to 105,000 on a year-to-date basis.

### **Employment: Private vs. Public**





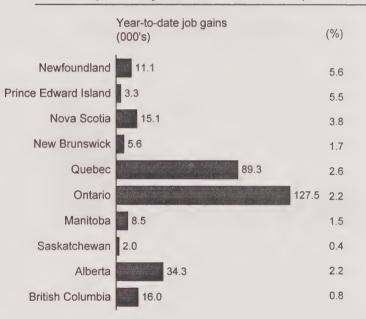
## ...with substantial gains in most regions of the country...

In absolute terms, Ontario and Quebec have accounted for nearly 7 of 10 net new jobs created so far this year.

However, employment growth has been strongest in Newfoundland, Prince Edward Island and Nova Scotia. In fact, year-to-date gains in Newfoundland and P.E.I. have exceeded 5%.

Employment is up only slightly in Saskatchewan and British Columbia so far this year.

## Employment Growth by Province (January to November 1999)





## ...though gaps in labour market performance persist

Provincial unemployment rates in November ranged from a low of 5.2% in Alberta to a high of 16.1% in Newfoundland.

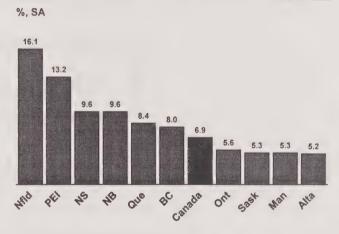
So far this year, unemployment rates are down in all provinces, but especially in Newfoundland (down 2.6 percentage points to 16.1%), P.E.I. (-2.2 points to 13.2%) and New Brunswick (-2.0 points to 9.6%).

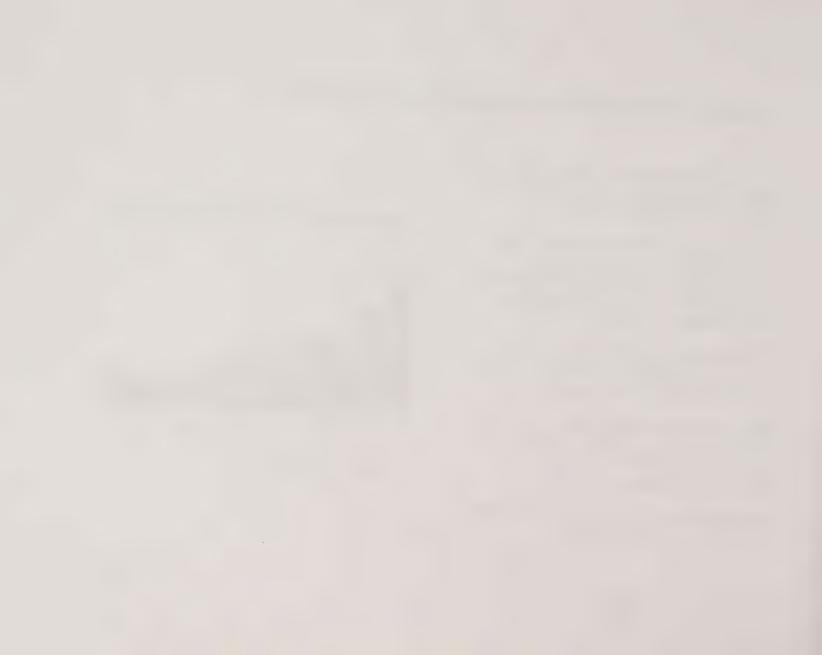
- Despite this significant improvement, unemployment rates in Atlantic Canada remain well above the national average.

Other notable declines include a drop of 1.5 percentage points in Quebec, bringing its unemployment rate down to 8.4% in November, the lowest since 1976.

The unemployment rate in Ontario is down 1.3 points so far this year (5.6%).

#### **Unemployment Rates: November 1999**





Financial Variables



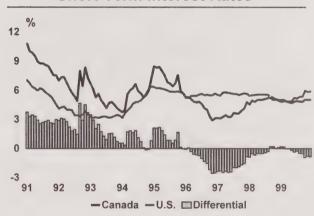
### The Bank of Canada raises short term rates in November ...

The Bank of Canada raised its trend-setting Bank Rate by 25 basis points to 5.00% on November 17. This move reflects the growing strength of the domestic economy and follows a similar rise in the U.S. federal funds rate.

- The increase – the first since August 1998, preceded by five consecutive declines – raised the Bank Rate back to that prevailing before it was hiked a full percentage point in the midst of the Asian financial crisis.

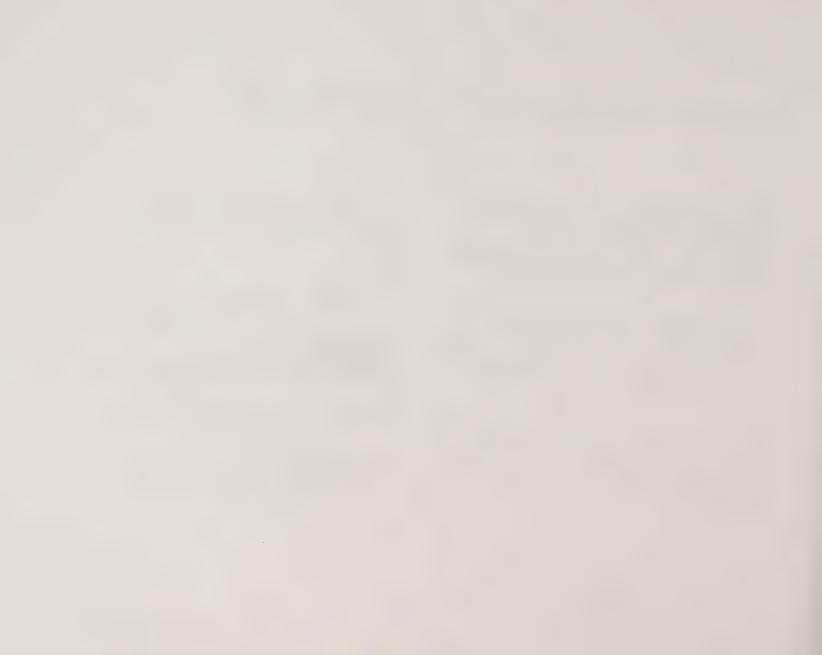
With U.S. short-term rates rising more quickly during the year, the gap between Canadian and U.S. rates widened from 10 basis points at the beginning of the year to 85 basis points on December 1st.

#### **Short-Term Interest Rates**



Last data point plotted: December 1, 1999

Source: Bank of Canada, 90-day Commercial Paper, last Wednesday in the month



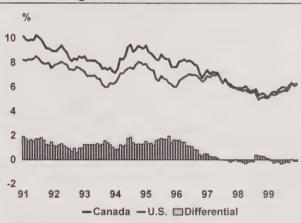
## ...as long-term rates trend up

North American bond yields have risen steadily throughout the year in response to concern over the fast pace of growth (particularly in the U.S.) and fears of higher future inflation.

By December 1, Canadian long-term rates were up nearly one full percentage point on the year.

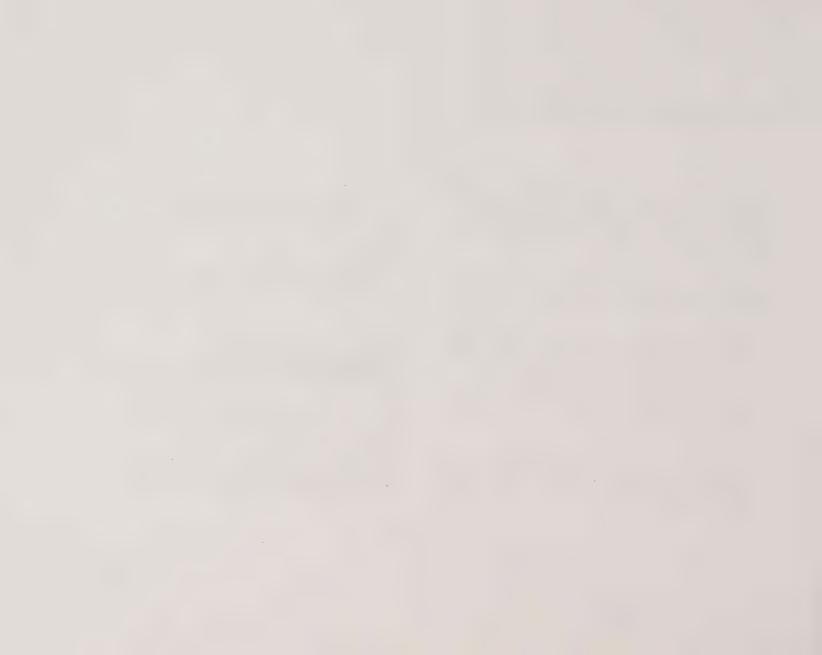
- At the beginning of the year, Canadian long rates were slightly above comparable rates in U.S. However, U.S. bond yields rose more quickly early in the year, pushing domestic rates 35 basis points below U.S. rates by the end of June.
- Long rates have since increased more quickly in Canada, bring them closer in line with those in the U.S.

#### **Long-Term Interest Rates**



Last data point plotted: December 1, 1999

Source: Bank of Canada, Government long-term bond, last Wednesday in the month



## Higher commodity prices and the strong economy provide a boost to the Canadian dollar...

The Canadian dollar has gradually recovered after hitting an all-time low of US 63.31¢ in August 1998.

Greatly improved economic fundamentals at home and a global rebound in commodity prices have provided underlying support for the dollar, which traded above US 69¢ early in May.

Against this general upward trend, the dollar has weakened on occasion given fears of higher U.S. interest rates.

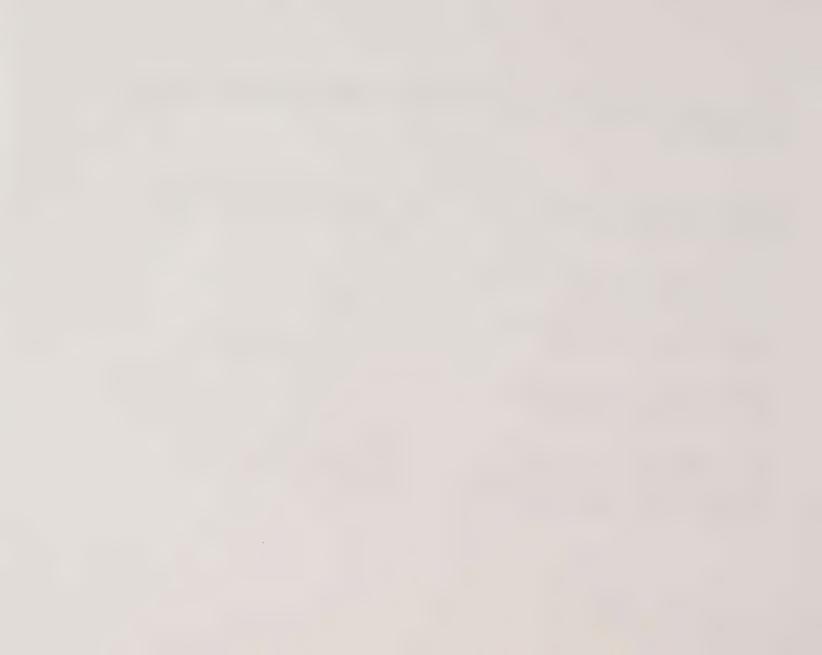
Still, the dollar closed December 3rd at US67.6¢, up roughly one and a half cents from the beginning of the year, and is well positioned for further gains in 2000.

#### Canada-U.S. Exchange Rate



Last data point plotted: December 3, 1999

Source: Bank of Canada



## ...while stock markets reach record highs

Canadian stock prices have increased steadily throughout 1999, and have made especially strong gains in late October and November.

Fuelled in large part by high-tech stocks, the TSE 300 index hit a new intra-day high of 7889 on November 26 before falling back slightly.

 Canadian stocks have become increasingly attractive given the rebound in natural resource-based industries, an improved outlook for the Canadian economy, and the perception that Canadian stocks offer relatively good value.

As of December 3, the TSE was up just over 1,300 points on the year, an advance of 20% on the year.



Last data point plotted: December 3, 1999

Fiscal Track



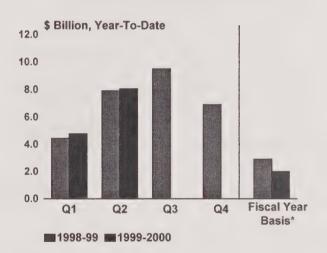
## Federal finances on track for third consecutive year in the black

In November's *Economic and Fiscal Update*, the Department of Finance reported on its consultations with private sector forecasters.

- After posting surpluses in the past two years, a surplus of \$2 billion is projected for the current 1999-2000 fiscal year. This includes a \$3 billion Contingency Reserve which will be put toward reducing the debt if not needed.
- Estimates for subsequent years range from a surplus of \$5.5 billion in fiscal year 2000-01 to \$23 billion by 2004-05.

Other levels of government have also had some success in reducing budget deficits. Along with the federal government, five provinces and one territory are expected to post balanced budgets or surpluses in the current fiscal year.

#### Federal Budgetary Balance



Source: Department of Finance

\*Projected surplus for 1999-2000 includes \$3 billion

contingency reserve.



Competitiveness



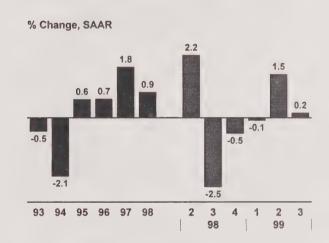
## Steady unit labour costs...

Canadian firms have been quite successful in holding unit labour costs down. Unit labour costs rose only 0.2% (annual rate) in the third quarter of 1999.

- The total wage bill increased by 4.9% (annual rate), only slightly surpassing growth in total output (4.7%).

With this third-quarter result, unit labour costs have ben flat or declined in four of the past five periods.

#### **Growth in Unit Labour Costs**



Source: Industry Canada calculations

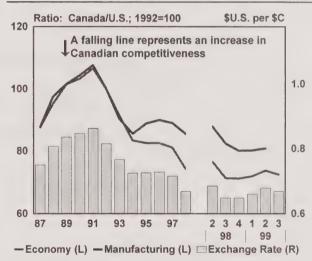
## ...and a falling dollar improve Canada's competitive position

A stronger dollar weakened Canada's competitive position in the first half of 1999, but this situation has been reversed in the third quarter.

At the economy-wide level, and on a common currency basis, Canadian unit labour costs were down 1.8% relative to those in the U.S. in the third quarter.

- Most of this improvement is due to the weaker Canadian dollar, which fell by just over one cent against its U.S. counterpart.
- However, Canadian firms were also better at containing costs, with unit labour costs rising more slowly at home than in the U.S.

#### **Unit Labour Cost Comparison (\$US)**



Note: Quarterly manufacturing ULC for 1999Q3 are not yet available. Source: Industry Canada estimates based on data from the U.S. Bureau of Labor Statistics & Statistics Canada



International Accounts

# Canada records its first current account surplus in nearly three years...

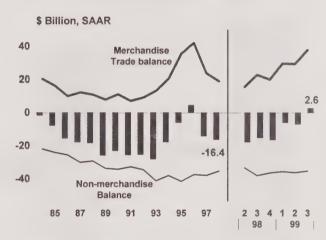
Canada posted a current account surplus of \$2.6 billion (annual rate) in the third quarter of 1999. The current account was last in surplus at the end of 1996.

- This quarter's swing from deficit to surplus was due almost entirely to a sharp improvement in Canada's merchandise trade surplus.

On the capital account, Canadian assets abroad rose \$26.2 billion in the third quarter, with gains in direct, portfolio and other forms of investment.

Canadian liabilities abroad increased by \$13.4 billion, dominated by a large rise in foreign direct investment in Canada.

#### **Current Account & Trade Balances**



The merchandise trade balance represents net exports of goods.

The non-merchandise trade balance represents net exports of services plus net receipts of investment income and transfers.



## ...largely due to a big jump in the merchandise trade surplus

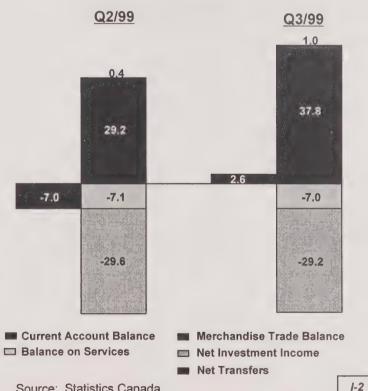
### **Main Components of the Current Account**

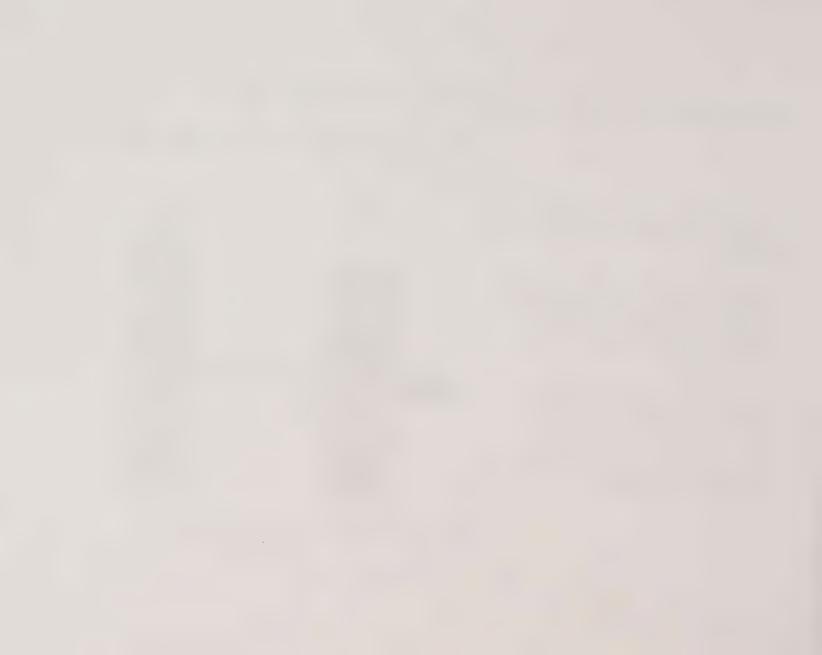
\$ Billion, SAAR

All major components contributed to Canada's improved current account position.

However, the most important factor by far was a nearly \$9.0 billion increase in the merchandise trade surplus, which reached \$37.8 billion (annual rate) in the third quarter.

A higher surplus on transfers and slightly lower deficits on investment income and trade in services made smaller but nonetheless positive contributions to Canada's improved current account position.





## Surging exports to the U.S. ...

Compared to the same period last year, merchandise exports were 11.9% higher in the first nine months of 1999.

 Higher sales to the U.S. – which accounts for roughly 86% of all exports – are responsible for this increase. Shipments to the rest of the world are down on a year-to-date basis.

With the exception of Industrial Goods & Materials, exports from all main commodity groups are higher.

- Exports of Automotive Products and Energy Products have registered particularly sharp gains this year.

#### Merchandise Exports, Year-to-date

	Jan-Sept/99 \$ Billion	% Change, Jan-Sept/98 - Jan-Sept/99
Total	265.4	11.9
By Trade Partner		
U.S.	228.2	15.7
Japan	6.8	-4.4
Ė.U.	13.4	-0.5
All Others	17.0	-12.7
By Principal Commodity		
Agricultural & Fishing Products	19.0	1.6
Energy Products	20.9	14.4
Forestry Products	28.9	10.7
Industrial Goods & Materials	42.2	-2.7
Machinery & Equipment	62.4	6.2
<b>Automotive Products</b>	71.7	32.3
Other Consumer Goods	10.2	11.2

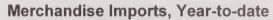
## ... have resulted in a sharp improvement in Canada's trade picture

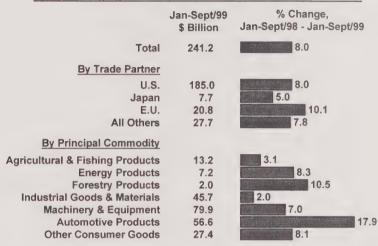
Merchandise imports are up 7.5% over the January-September period when compared to last year.

- Import growth has been widespread across all major commodity groups, with a particularly sharp gain in imports of Automotive Products.
- Import growth has also been fairly well-balanced across regions, in contrast to what is observed for exports.

Canada's merchandise trade surplus over the January-September period totalled \$24.1 billion, almost double that of last year.

- All of this improvement is due to a higher trade surplus with the U.S.





#### **Balance by Trade Partner, Year-to-date**

	Jan-Sept/99 \$ Billion	Change (\$Billion) Jan-Sept/98 - Jan-Sept/99
Total	24.1	10.2
U.S. Japan E.U. All Others	43.1 -0.9 -7.4 -10.7	-0.7 -2.0 -4.5

Source: Statistics Canada

1-4



Sectoral Overview

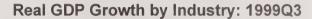
### Manufacturing leads all sectors in growth in the third quarter...

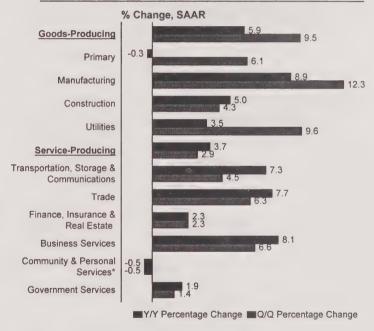
Output in the Goods-producing industries rose a solid 9.5% (annual rate) in the third quarter of 1999, with gains in all major groups.

- A surge in Manufacturing activity (notably the production of motor vehicles and computer equipment) was due in large part to strong exports to the U.S. market.
- Rising commodity prices spurred higher output in the Primary sector, including gains in Mining and Forestry.

Service-producing industries advanced 2.9% overall (annual rate) in the third quarter.

 Output was higher across most major groups, led by continued strength in Retail & Wholesale Trade and Business Services (particularly computer consulting and temporary help agencies).
 Community & Personal services recorded the only decline in the third quarter.





Source: Statistics Canada

\*Education and Health & Social Services



### ...accounting for one of every two new jobs created...

Employment in the Goods-producing industries was up 164,000 (+4.4%) over the first eleven months of 1999.

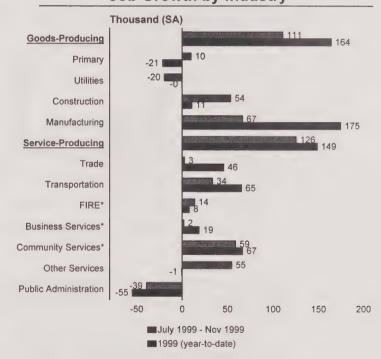
- This increase is due entirely to gains in Manufacturing, where employment has increased by 175,000.
- Employment was little changed elsewhere in the Goods sector on a year-to-date basis.

Employment increased by 149,000 (+1.4%) between January and November in the Services-producing industries.

 These gains were concentrated mainly in Community Services and Transportation industries. There was a notable decline in employment in Public Administration.

Job growth has picked up noticeably in the last half of the year across most industry groups in both the Goods-producing and Service-producing sectors.

### Job Growth by Industry



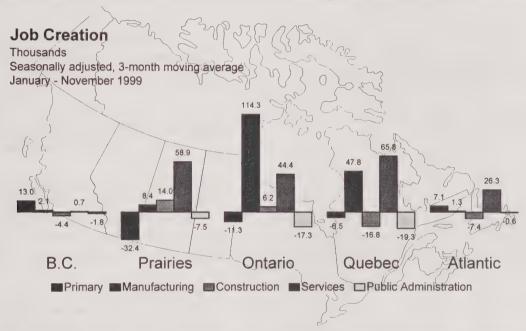
#### Source: Statistics Canada

\*FIRE: Finance, Insurance, Real Estate and Leasing
Business Services: Management, Administrative, Professional, Scientific & Technical Services
Community Services: Educational Services, Health & Social Assistance.

J-2

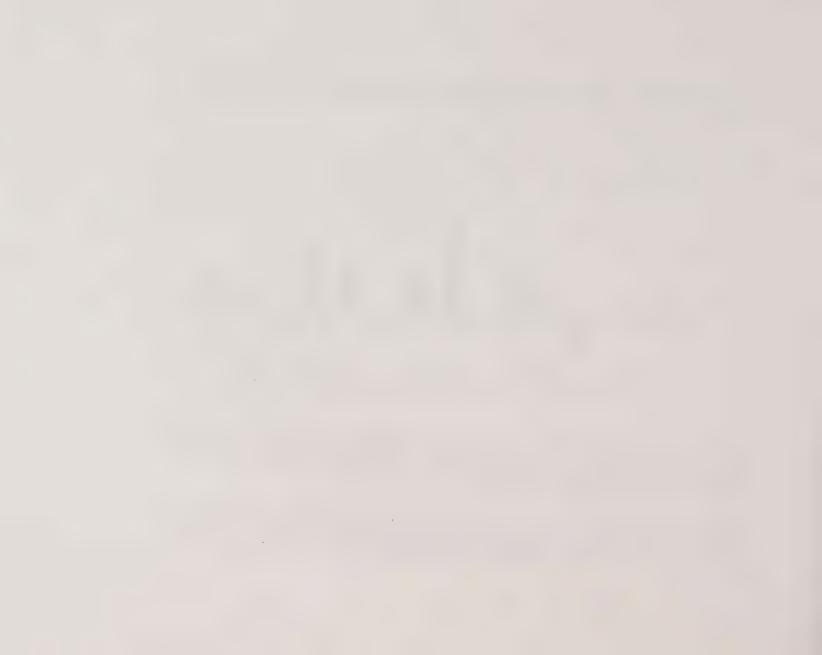


### ...although these gains are confined mainly to Central Canada



Most of the new Manufacturing jobs have been located in either Ontario or Quebec. Employment in Services is up across all regions, serving as the main engine of job growth in the Prairie provinces, Atlantic Canada and Quebec.

Workforces have expanded in the Primary industries in both British Columbia and Atlantic Canada, but all other regions have experienced declining employment in this sector. The number of jobs in Public Administration is down across the country.



### Capacity utilization jumps up closer to its pre-recession peak...

Capacity utilization in the Non-farm Goods-producing industries jumped up nearly two full percentage points to 86.0% in the third quarter.

- This is the highest since early 1988, when capacity use reached 86.8%.

While gains were fairly widespread, the bulk of the overall increase in capacity utilization in the third quarter can be attributed to Manufacturing. Capacity use in this industry rose to 87.6%, its highest level in 25 years.

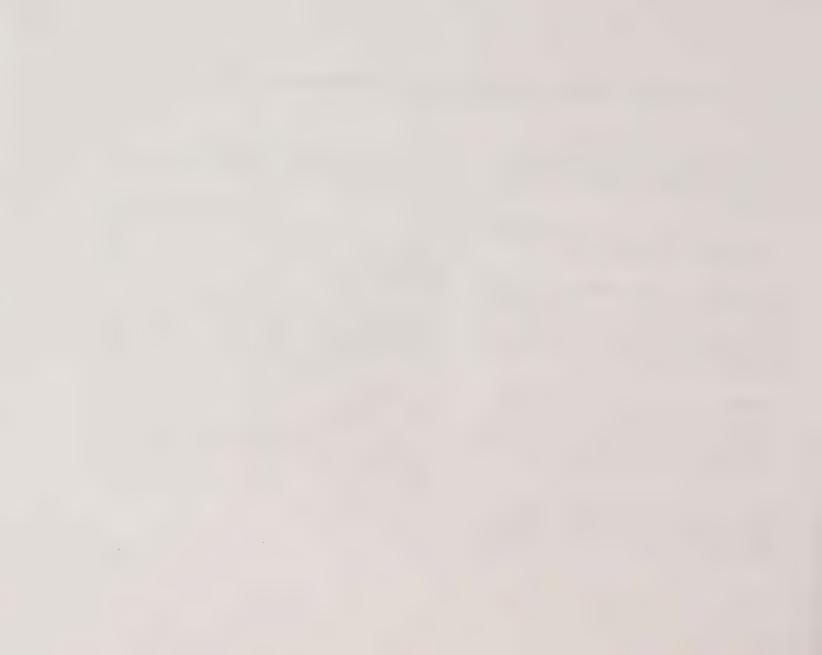
 Indeed, 7 of 22 industry groups within Manufacturing posted rates above 90%.
 Transportation Equipment and Electrical & Electronic Equipment in particular have benefitted from strong U.S. demand.

A large rise in Mining (+5.8 percentage points) was due to a surge in drilling and rigging activity related to higher oil prices.

### Capacity Utilization: Non-farm Goods-producing Industries

	Level (%) 1999Q3	Change Q/Q	(% points) Y/Y	10-year Average
Total Non-Farm Goods-Producing	86.0	1.8	3.6	81.6
Logging & Forestry	86.8	2.8	7.7	80.8
Mining & Quarrying	81.8	5.8	0.1	84.8
Crude Petroleum & Natural Gas	70.2	-1.1	-4.2	82.0
Manufacturing	87.6	2.1	4.9	80.5
Durable Goods Manufacturing	89.4	2.9	7.6	79.3
Primary Metals	86.5	-1.9	-2.8	87.6
Fabricated Metals	84.2	1.4	2.1	76.9
Transportation Equipment	95.6	5.1	16.6	79.5
Electrical & Electronic Products	93.3	5.0	10.2	78.0
Non-Durable Goods Manufacturing	85.3	1.1	1.5	81.9
Food Products	84.9	0.8	2.6	80.0
Paper & Allied Products	93.8	3.1	8.7	88.5
Printing & Publishing	81.0	0.5	-2.0	79.6
Chemical & Chemical Products	80.8	1.3	-2.3	84.1
Construction	89.0	0.9	4.0	84.0
Electric Power & Gas	86.5	1.8	2.1	82.5
Energy	79.0	0.4	-1.0	82.4
Total Excluding Energy	87.5	2.1	4.6	81.4

Source: Statistics Canada



### ...as operating profits rise for a fourth consecutive quarter...

Corporate operating profits were up 7.6% in the third quarter of 1999 (34.0% annualized), rising for the fourth consecutive quarter.

Gains were concentrated in Non-Financial industries (+12.4%), boosted by rising commodity prices and strong demand at home and in the U.S.

- Led by a sharp gain for producers of computers and other electronic equipment, operating profits rose 10.5% in Manufacturing.
- Profits have rebounded sharply from previous losses in the Natural Resource-based industries, reflecting rising demand and higher prices for raw materials.

Operating profits in the Finance & Insurance industries declined 3.5%. Slightly higher profits by banks, trust companies, credit unions and insurers were more than offset by losses in the Funds and Other Financial Vehicles industry.

**Corporate Operating Profits** 

	Level		Differe	nce
	(\$M)	99Q:	2-99Q3	98Q3-99Q
	99Q3	(\$M)	(%)	(%)
Agriculture, forestry, fishing & hunting	392	14	3.7	53.7
Mineral fuels	1867	756	68.0	239.5
Mining except mineral fuels	593	166	38.9	18.4
Utilities	1132	188	19.9	60.3
Construction	178	11	6.6	-16.0
Manufacturing industries	11704	1109	10.5	54.0
Trade industries	4390	261	12.7	143.5
Transportation and warehousing	1407	110	8.5	25.7
Information and cultural industries	1683	442	35.6	-1.1
Real estate, rental and leasing	1706	20	1.2	8.8
Professional/Scientific	989	115	13.2	143.0
Management of companies	637	-176	-21.6	-40.9
Other services to business	540	108	25.0	99.3
Education services	15	1	7.1	200.0
Health care and social assistance	378	26	7.4	31.7
Arts, entertainment and recreation	67	70	-2333.3	-309.4
Accommodation and food services	268	4	1.5	-14.6
Other services	975	-24	-2.4	84.0
Depository credit intermediation	4469	59	1.3	1.7
Non-depository credit intermediation	1350	-12	-0.9	49.2
Insurers	1052	93	9.7	11.2
Funds and other financial vehicles	3261	-399	-10.9	-7.9
Other financial intermediaries	742	-135	-15.4	-28.4
Total Non-Financial	28921	3201	12.4	47.1
Total Finance & Insurance	10874	-394	-3.5	0.5
Total - All Industries	39795	2807	7.6	30.5

Source: Statistics Canada



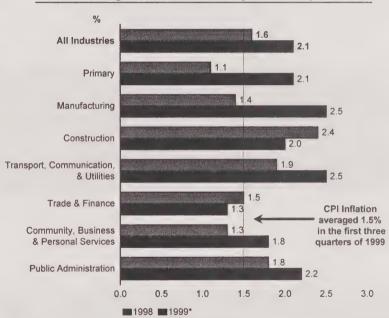
### ...and wage settlements run above last year's pace

Wage settlements have averaged 2.1% over the first three quarter of 1999, above the prevailing rate of inflation over this period (1.5%) and up from 1.6% last year.

- On average, the largest settlements so far this year have been in Manufacturing and Transport (2.5% in both cases), while Trade & Finance recorded the smallest advance (1.3%).
- Wage settlements are running above last year's pace in all industries except Construction and Trade & Finance.

Wage settlements in the private sector (2.3%) continue to outpace those in the public sector (1.9%). However, this margin has narrowed significantly since 1998.

### Wage Settlements by Industry



Effective average annual adjustments in base wage rates from major collective bargaining agreements.

Source: Human Resources Development Canada

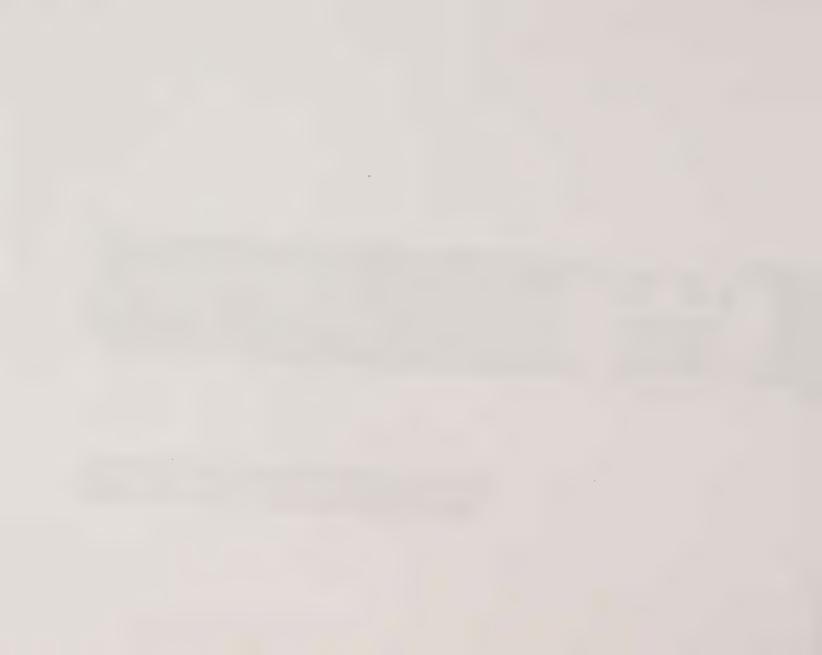
<sup>\*1999</sup> data cover agreements reached over the January to September period.

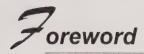




# Canada's Growing Economic Relations with the United States

Part 2 — Maximizing Our Opportunities





This is the second part of a three-part illustrative overview of Canada's strong and increasing economic relations with the U.S.

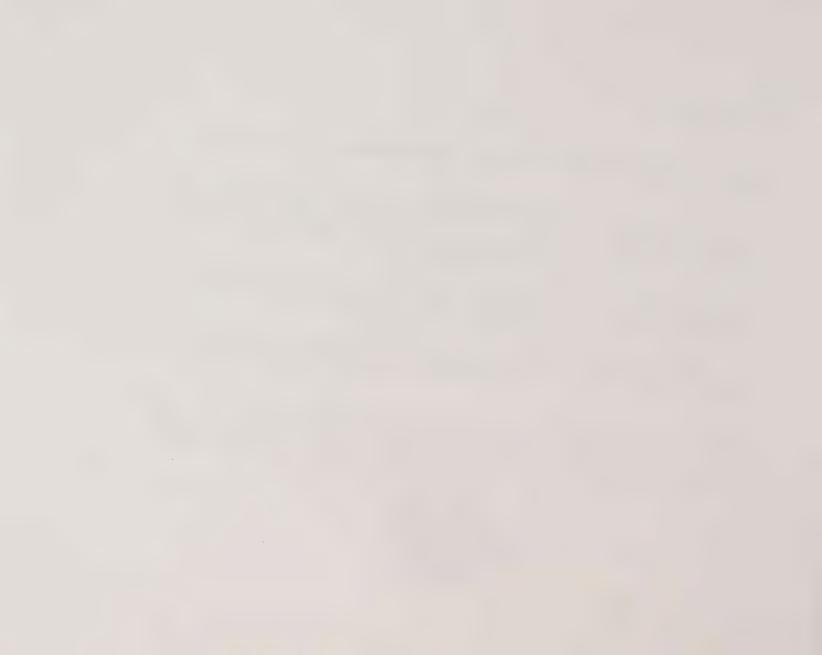
"Part 1 — What are the key dimensions?" was published in the Second Quarter 1999 issue of the Micro-Economic Monitor, and provided a snapshot of Canada's economic relations with the U.S. — highlighting their many dimensions and key trends. It examined their increasing strength, and paid particular attention to the changing nature of our exports to the U.S.

In this issue, we present "Part 2 — Maximizing Our Opportunities", which explores how we might better take advantage of economic opportunities in the U.S. It discusses many benefits of our growing economic relations, and identifies current export opportunities.

In next issue's "Part 3: Turning Challenges into Strengths", the key challenges in pursuit of these opportunities will be identified, as well as possible ways these challenges might be turned into advantages.

Especially at a time of rapid globalization, the information revolution and the transition by all countries towards more knowledge-based activities, it is key that Canada seize opportunities associated with our growing economic relations, especially in more value-added and knowledge-intensive activities that will be critically-important to Canada's future prosperity and standard of living.





### Our growing economic relations with the U.S. ...

As the 21st century dawns, our increasing economic relations with the U.S. are pivotal!

This is not only to take better advantage of attractive cross-border opportunities, but to be in an improved position to exploit new and emerging opportunities of a global nature.

As a result of globalization and the information revolution, Canadian business must be continuously prepared to undertake promising new areas of economic activity that depend on large market access. And the U.S. is key — the U.S. is the largest, richest, most dynamic and technologically-advanced market, with an abundance of opportunities.

In this feature, we will identify the key benefits to our close economic relations with the U.S. and pay particular attention to those opportunities which we must take advantage of, to better position ourselves for the future.

K-1



### ...provides us with many opportunities — if we are ready!

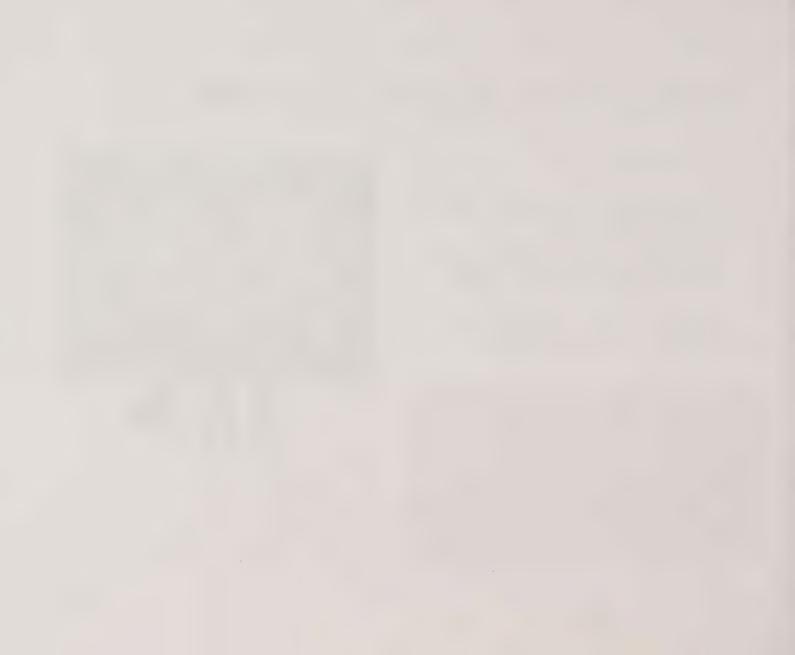
### But we must be ready.

- Globalization, the information revolution and the transition towards knowledge-based activities make the dynamic advantages of economies of scale and specialization much more possible.
- They also create new "essentials" for successful business — redefining old notions of competitive advantage.

This does not negate the important comparative advantages afforded by our natural resources, but gives greater prominence to inventiveness, productivity, quickness and the general ability to take advantage of opportunities, especially in more value-added and knowledge-intensive activities.



Canada will need to build on current comparative advantages, and develop new cost appropriate to a world where I mode light and impossible are increasingly key—and serging apportunities in the 11% will be metaumental to this end.



What are the key benefits?





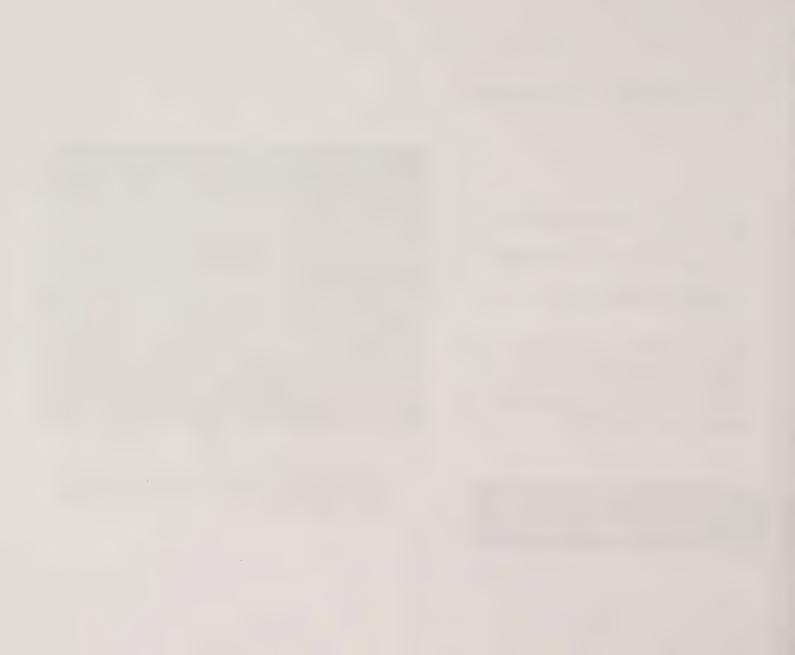
### For the outward-oriented, the U.S. is an obvious first-stop

The U.S. market has always been important to Canada, and will likely remain so.

For firms interested in expanding beyond the domestic border, success often comes from focusing on one foreign market at a time.

- The U.S. is close and while very competitive, it offers a relatively easy market to <u>begin</u> going global — a key first-stop.
- This is especially true for Canadian firms who are approaching exports as "first-evers" and "new-to-market".





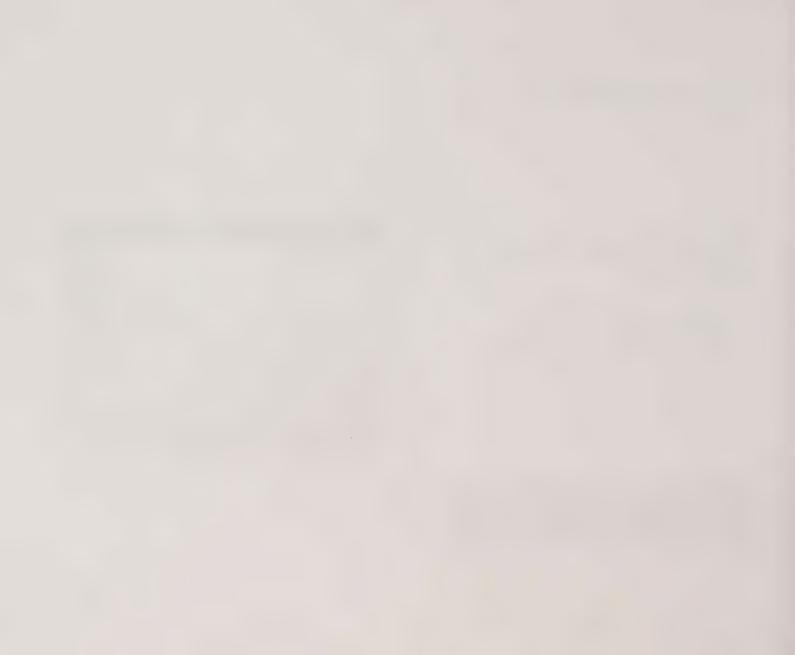
### ...that is fast-growing...

The U.S. economy has had the best performance of all G-7 countries over the past 10 years.

 Indeed, Canadian exports have benefitted substantially from the U.S.'s current economic expansion.\*



<sup>\*</sup> See "Canada's Growing Economic Relations with the United States: Part 1 — What are the key dimensions? ", The Micro-Economic Monitor (2nd Quarter 1999).

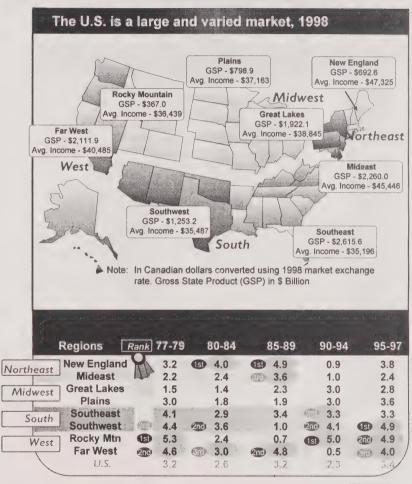


### ...and exceptionally diverse

The U.S. market is not only huge, but quite diversified — with many regional economies.

- Over the past 20 years there has been continual change in the list of stronger and weaker geographic performers.

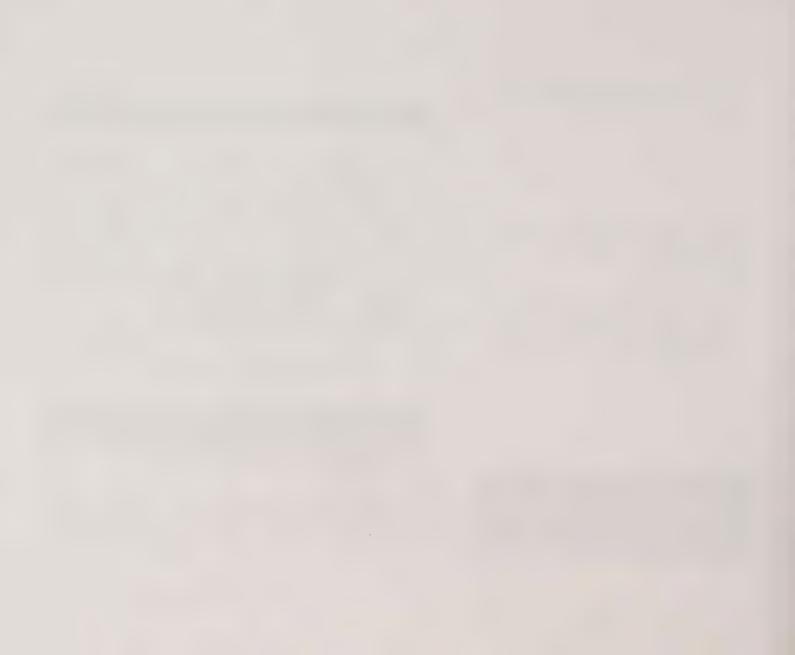
Canada can diversify within the U.S. by expanding our trade relations and interests more thoroughly throughout the U.S.



Rank: 1st and 60

Source: Statistics Canada and U.S. Dept. of Commerce

L-4

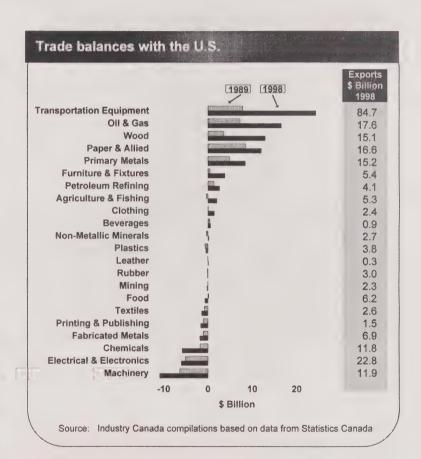


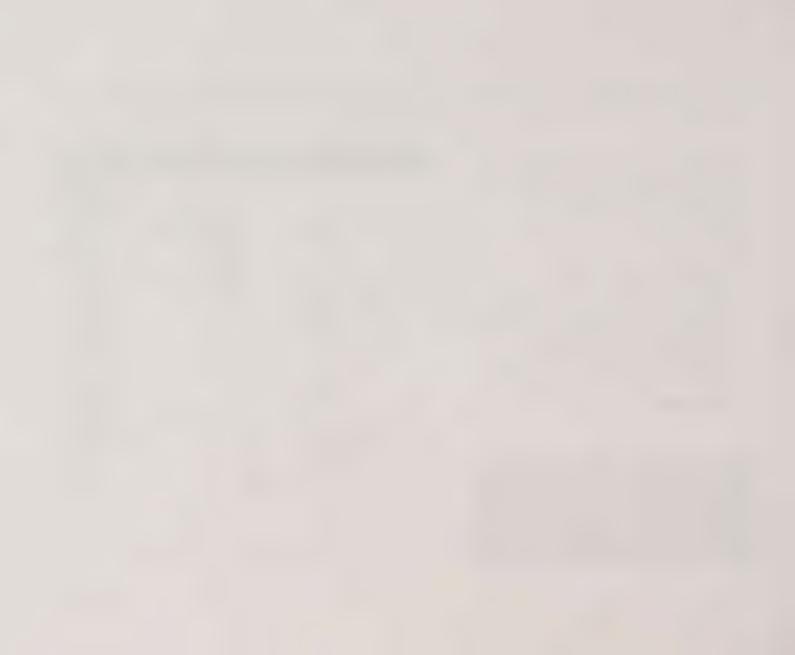
### And while our U.S. economic relations benefit export specialization...

Canada's U.S. economic relations have contributed to growing trade balances in resource-based exports and in transportation equipment (mainly autos).

- These are sectors that have traditionally produced surpluses but are now running increasingly large surpluses. This deepening of trade balances is consistent with increased specialization in areas where Canada has a comparative advantage.

Canada's net trade flows with the U.S. are increasingly positive in resource-based industries in which Canadian exports have comparative advantage and are already strong.



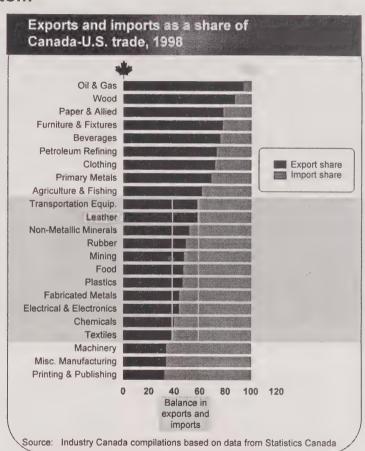


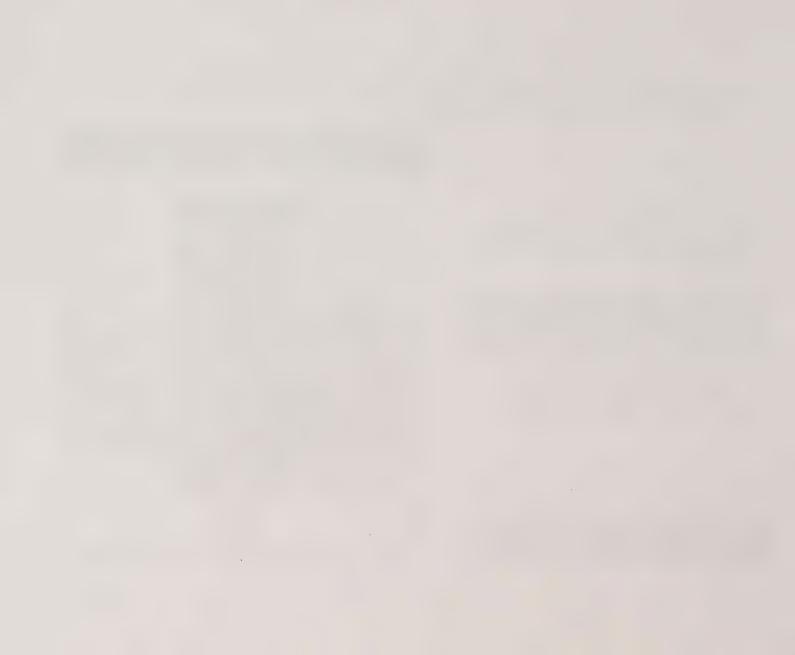
## ...they also permit our industries and firms to specialize in the export of differentiated products...

As our economies become more linked, there is, within many industries, considerable and growing trade in both directions.\*

- Indeed, in many industries, there is almost a balance in exports and imports.
- This is suggestive of product differentiation and specialization, and of highly integrated markets.

\* As shown in detail in "Canada's Growing Economic Relations with the United States: Part 1 — What are the key dimensions?", The Micro-Economic Monitor (2nd Quarter 1999).





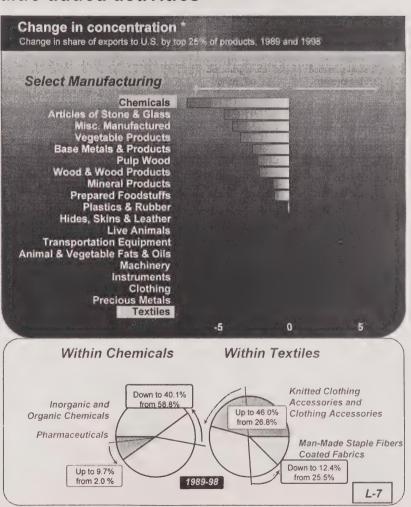
### ...sometimes involving more value-added activities

Many sectors are seeing an increase in the export share of more processed items. In sectors where such exports are small, we see export diversification occurring. In industries where such exports are relatively large, we see an increase in export concentration in these activities.

- Within the Chemicals sector, exports from the Pharmaceutical industry are growing in importance.
- Within Textiles, the export share of more complete clothing accessories is rising.

Value-added activities include work involving further and/or more advanced processing and sometimes more knowledge-based endeavours.

Industry sub-components that are expanding fastest are often those requiring further processing or more knowledge-based activity, e.g. Pharmaceuticals.



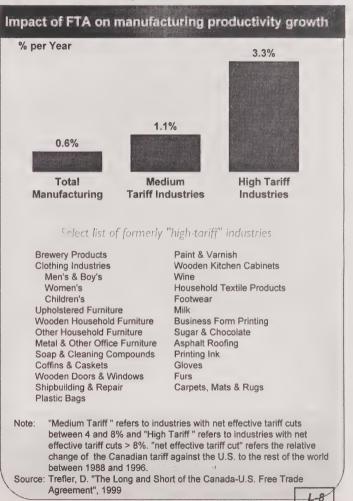


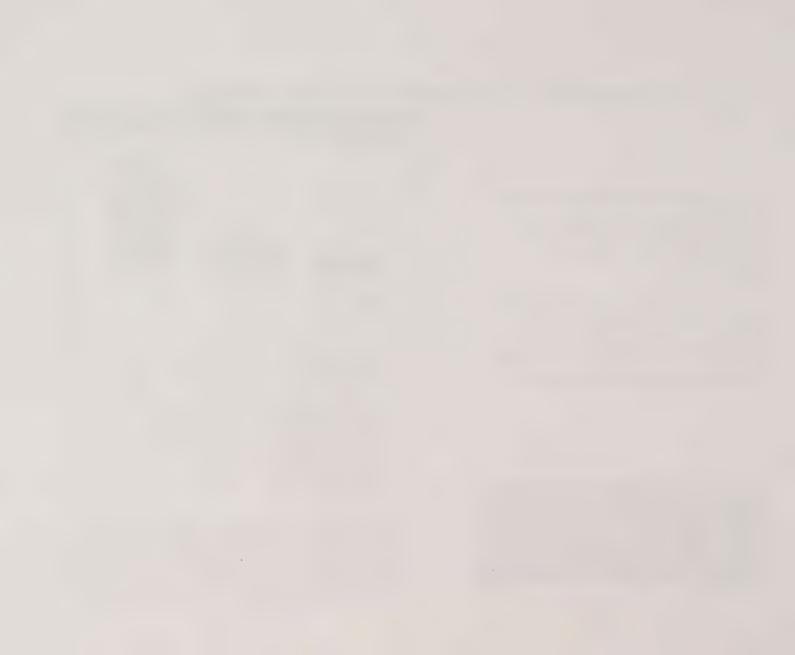
### Access to a larger market helps us become more productive...

Recent research shows that industries which experienced large tariff reductions following the FTA, also showed the biggest productivity improvements.

Not only were many of these industries able to withstand a drop in tariff protection, they were also able to find viable and valuable niches in the larger and now more accessible U.S. market.

The FTA and subsequently the NAFTA have had an important and positive impact on the level of Canada - U.S. trade, but as well on helping Canadian industries become more productive.

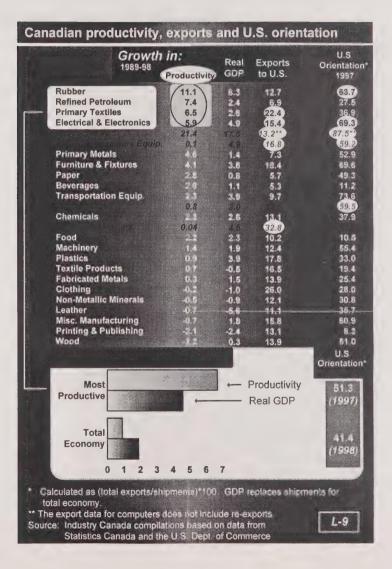




#### ...and faster growing

Many of our industries that are increasing fastest in productivity are among our most U.S. market-oriented.

These industries have been contributing significantly to our recent growth.



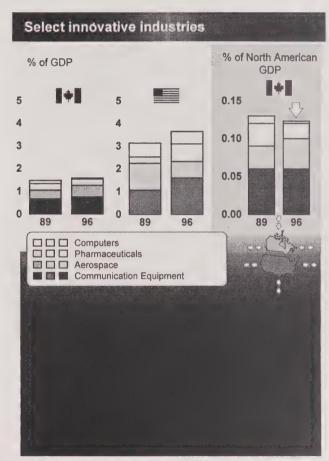


#### Large markets help industries become more innovative...

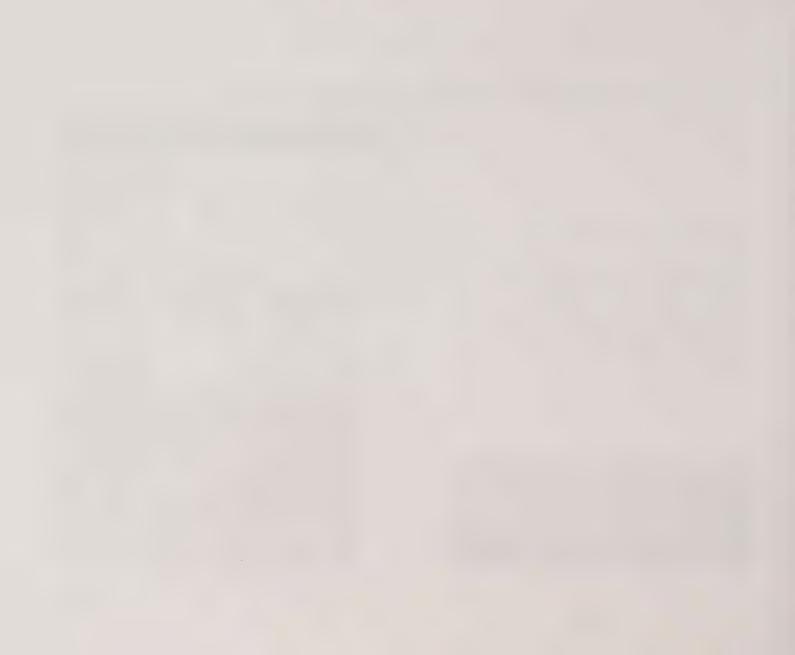
The costs of innovation are high.

Without a huge market to sell into, the cost of conceiving, developing and commercializing new products, implementing new techniques, and investing in human capital may be difficult to justify.

It is no coincidence that many of Canada's innovative industries are becoming increasingly outward-oriented, e.g. Communication Equipment, Aerospace, Pharmaceuticals and Computers.



Source: Industry Canada compilations based on data from Statistics Canada and the U.S. Dept. of Commerce



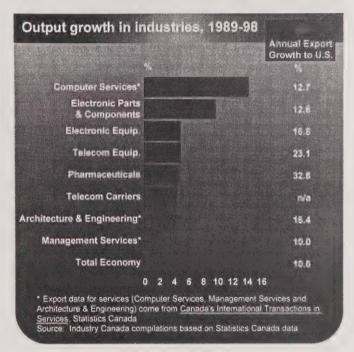
#### ...and to engage in more new or emerging industries / activities

Access to the U.S.'s larger market makes it financially feasible for new firms to participate in promising value-added and knowledge-intensive industries.

Many of these industries are just beginning to emerge.

- And insomuch as these activities are at the cutting-edge and often provide productivity-enhancing goods and services to other industries, they provide the impetus for further innovation and the improved competitiveness of other sectors.

Access to the U.S. market is extremely important for many firms in fast-growing emerging industries — the promise of these new areas of economic activity depend on firms' abilities to quickly take advantage of large markets and cover start-up and innovation costs.



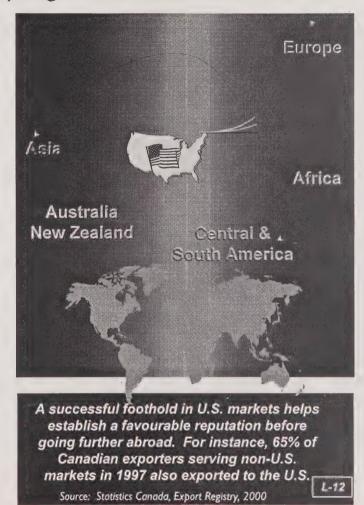
In recent years, we have seen a proliferation of new firms in emerging industries such as information and communications hardware and software, bropharmaceuticals as well as in a host of other areas from bro-agriculture, bio-aquaculture, bioforestry to environmental technologies, telehealth and aerospace.



#### Success in the U.S. can also be a springboard to other markets

The U.S. also serves as an ideal gateway to global markets, especially in more value-added and knowledge-intensive areas.

- The U.S. market is the easiest for many Canadian businesses to enter, and to learn the process of exporting, before going more global.
- Plus, since the U.S. is the world's vanguard market for many new products and services, success in the U.S. will establish Canada's brand and position Canadian business for success elsewhere.





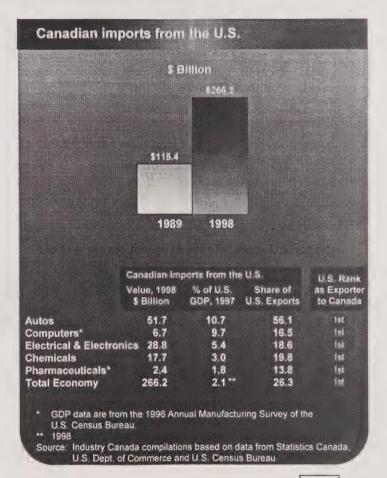
#### In addition, economic integration is a two-way street...

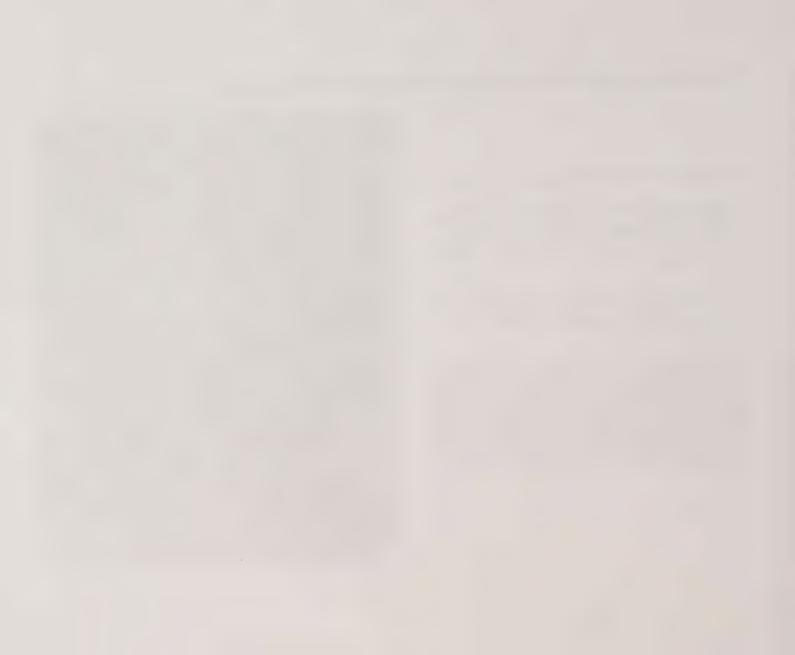
Our relations benefit U.S. producers too!

Canadian imports from the U.S., in nominal terms have doubled; and as a percent of U.S. output, have risen from 1.8% in 1989 to 2.1% in 1998.

We are also the most important market for U.S. exporters in a number of major industries. E.g.:

- Autos
- Computers
- Electrical & Electronics
- Chemicals
- Pharmaceuticals





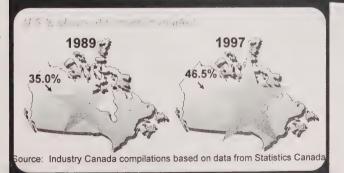
#### ...and be sure, the U.S. is pursuing opportunities in Canada

U.S. firms are not waiting to take advantage of opportunities when they see them in Canada.

The U.S. share of imports in Canadian markets is high and increasing in many industries.

It becomes crucial that Canadian firms strengthen their base by also seeking opportunities in U.S. markets.

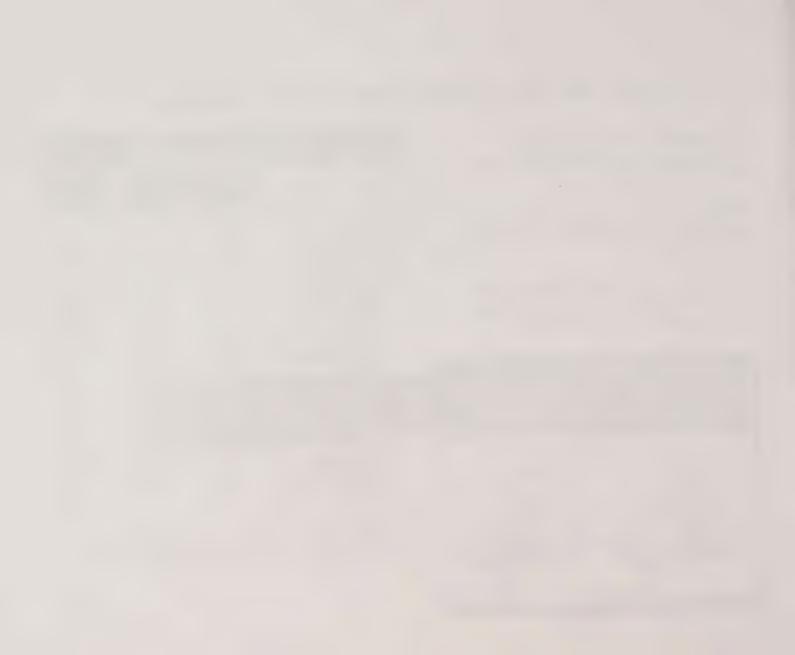
U.S. export penetration is rising in many key Canadian markets — and especially in many high-tech, high-knowledge industries.



	Share of Can 1989	Percent Change 1989-97	
Resources	%	%	%
Agriculture*	25.4	39.6	55.6
Logging & Forestry*	4.7	6.1	30.7
Mining & Oil*	10.6	12.1	13.7
Manufacturing			
Food & Beverages	4.8	9.8	104.5
Rubber & Plastics	21.7	30.1	38.9
Textiles	14.4	34.4	138.6
Clothing	1.9	8.5	344.6
Wood	8.5	13.2	56.8
Furniture & Fixtures	13.1	29.9	127.8
Paper	11.6	25.2	118.4
Printing & Publishing	10.2	15.9	55.9
Metals	17.1	28.7	67.5
Machinery	46.9	54.6	16.4
Transportation Equipment	40.6	50.8	24.5
Electrical & Electronics	34.6	49.9	44.3
Computers	58.7	62.7	6.9
Non-Metallic Minerals	2.9	22.4	73.2
Refined Petroleum	5.9	8.4	43.4
Chemicals	10 N	36.8	93.8
Pharmaceuticals	8.6	22.7	162.2
Professional Services			
Computer Services*	9.7	10.9	12.0
Architecture & Engineering*	4.9	8.2	68.1
Transportation*	9.9	15.1	52.8

\* GDP in place of shipments was used in market calculations. In addition, the relevant time period is 1992-1996 for Architecture & Engineering.

Source: Industry Canada compilations based on data from Statistics Canada



# Opportunities for the taking?





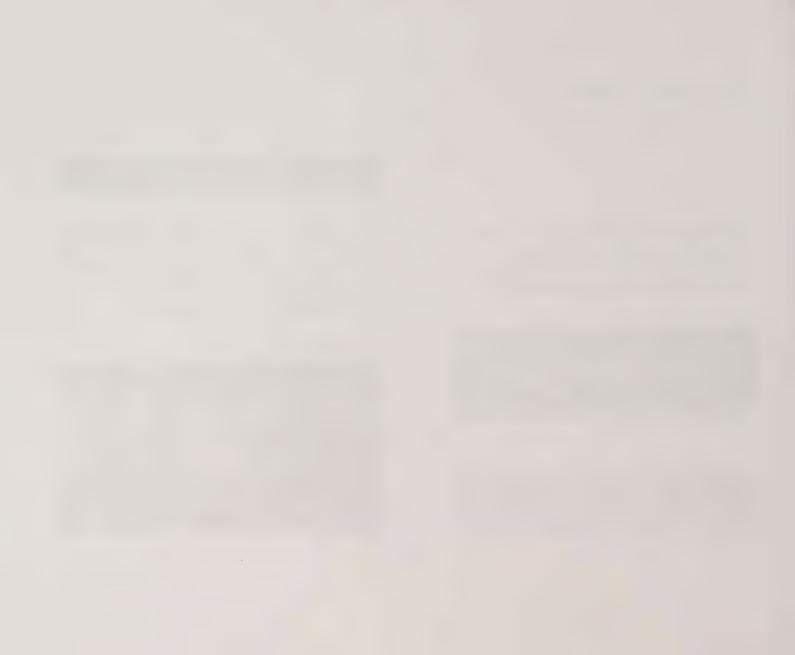
#### Still room to grow!

It is important to note that even though Canadian exports to the U.S. have grown significantly since 1989, there are still considerable opportunities.

Canada's export share of the U.S. market remains small — 2% in 1998.

This was also shown in "Canada's Growing Economic Relations with the United States: Part 1 — What are the key dimensions?", The Micro-Economic Monitor (2nd Quarter 1999).



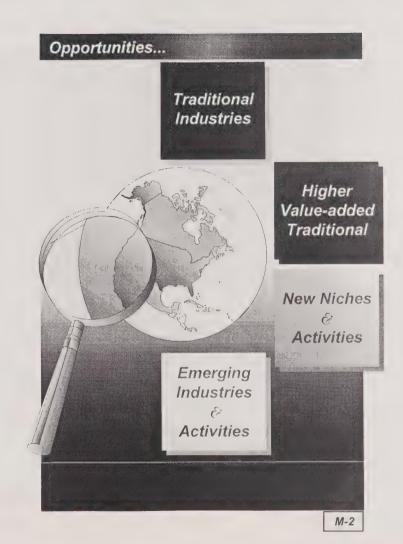


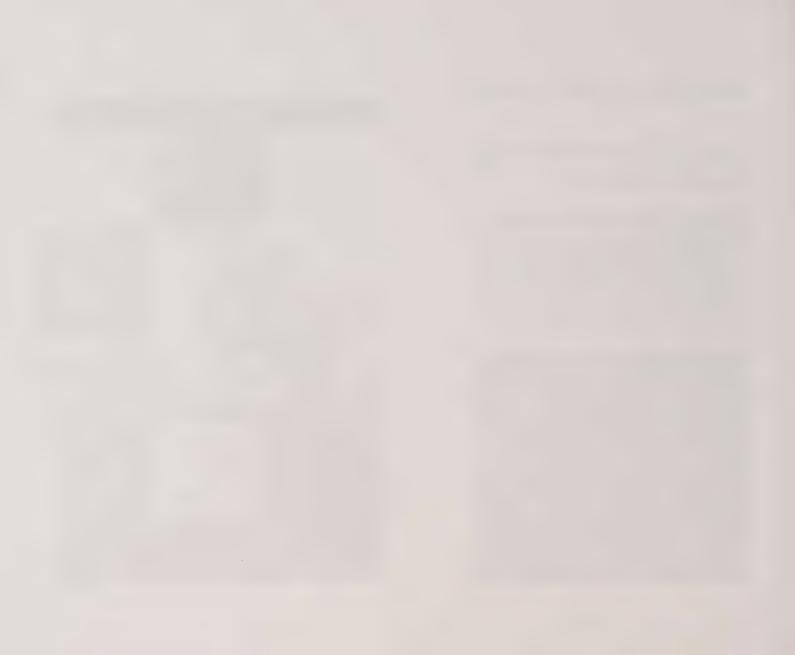
#### What kind of opportunities?

Every kind! Encompassing all types of products and services. There are still abundant opportunities in:

- traditional export products and services
- new value-added areas built on traditional strengths
- product/service niches
- -new and emerging areas.

Canada's export opportunities include but are not limited to resources and resource-based products. Indeed, taking fuller advantage of opportunities means expanding Canada's exports to a wider range of activities, including products and services that could be particularly important for our future prosperity, as well as broadening our export markets throughout the whole of the U.S.





### ...from traditional exports to exports in new emerging areas

Traditional Industries

The Professional Canada's largest exports have been in Resources and the sure of Products (reflecting comparative advantage) and in Autos & the sure of the sure markets.

Higher Value-added Traditional Within Canada's traditional exports, there has been considerable growth in the export of more value-added products and services\*, i.e. involving further and/or more advanced processing and sometimes more knowledge-based endeavours. These exports depend on firm-level productivity or competitiveness beyond any industry comparative advantage, since Canada could otherwise ship these natural resources elsewhere for processing.

New Niches
&
Activities

militeral experiences of niches that are growing in the minimum in which Canada is a net world to the minimum in the frequently rely on firm-lavel competitive to the minimum inhovative activities, or special market

Emerging Industries

industries in which there are a high proportion of new firms and lots of "churning" New or emerging markets can be very active and competitive and the nature of competition can change as markets develop. Positioning, staying on the leading-edge, and taking quick advantage of opportunities can all be crucial to the growth and export success of firms in these industries.

These activities often also involve new niches, but are frequently young

**Activities** 

Some of Canada's natural resource exports are very high value-added. But often there can be further processing that uses
additional domestic inputs (sometimes requiring higher knowledge or skill activities) and adds further value.

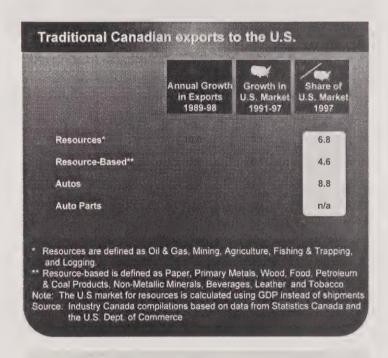


#### There is still considerable room to grow in traditional export areas...

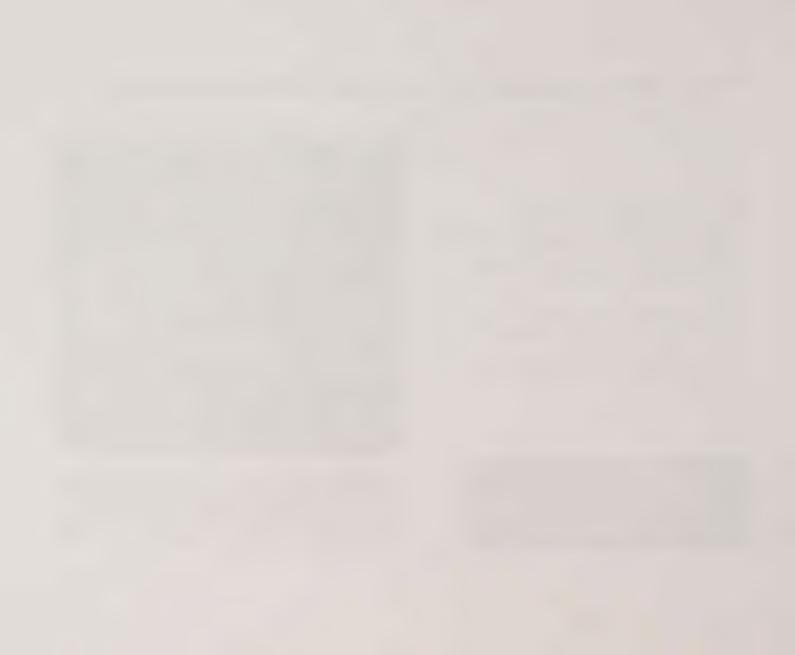
Even though Canadian traditional exports are large relative to other exports, and have generally grown faster than the U.S. market, our market share here, too, remains small.

As transportation links develop further, and our knowledge of U.S. markets grows, Canada's exports should broaden more thoroughly throughout the U.S.

Even in traditional exports, the U.S. provides abundant opportunities and remains a highly attractive target for further exports.



Canada's traditionally large exports include Resources and Resource-based Products (comparative advantage) and Autos & Parts (integrated auto market).



#### ...especially if we can add value to our traditional exports

The fastest growing segments in Canada's resource-based exports are in more processed endeavours.

 Our market share in these endeavours is much smaller, while these U.S. markets tend to be large and growing quickly.

In an era of global commodities, exports of primary and basic products alone may no longer provide sustainable prosperity. Technology allows new producers of basic goods to come forward even from overseas, putting yet our traditional exports in a more vulnerable position.

A challenge facing Canada is to devise new ways to draw upon the strengths of our existing industry, and to enhance their strongest elements, i.e. in value-added ways.

Canadian exports to the U.S.							
	US\$ Billion 1998	Annual Growth, % 1989-1998	US\$ Billion 1999	Annual Growth, % 1989-1999	Our Share of U.S. Market 1998		
Agriculture	3.1	11.9	156.2	2.0	20		
Wood & Paper	20.8	5.5	300.2	3.5	7.1		
Mining & Oil Well Industries	123	8 1	112 5	0.9	10 1		
Oil & Gas	11.5	9.1	67.7	21	15 3		

Traditional value-added include products and services that involve further and/or more advanced processing and sometimes more knowledge-based endeavours. These exports reflect firm-level productivity or competitiveness beyond any industry comparative advantage.

\* Please also see niches and emerging industries on next two slides.

Source: Industry Canada compilations based on data from the



Canada must find ways to add value to traditional exports.

M-5



#### Nontraditional export niches hold considerable promise...

We are witnessing a world of dynamic, fast-paced change, where firm-level competitive advantages can translate into niche market success.

#### Recent niches include:

- Clothing
- Furniture & fixtures
- Rubber & Plastics
- Commercial services

Canada's market share remains small, even in our most successful niches, so the future holds considerable promise.

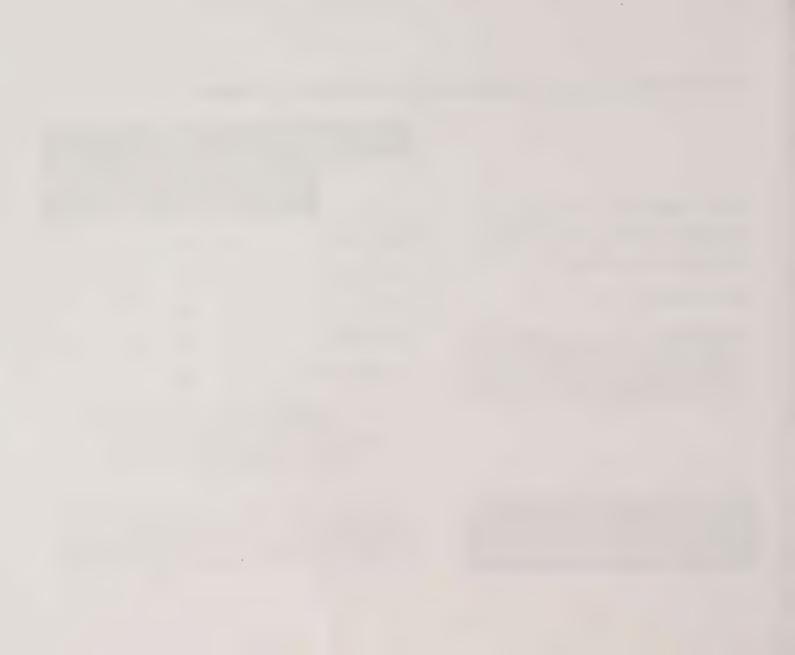
Canadian exports to the U.S.								
	US\$ Billion 1998	Annual Growth, % 1989-1998	US\$ Billion 1999	Annual Growth, % 1989-1999	Our Share of U.S. Market, % 1998 *			
Clothing & Textiles	2.7	19.0	195.3	3.1	1.4			
Furniture & Fixtures	3.7	13.8	71.5	5.0	5.3			
Chemicals	4.2	4.3	144.5	1.8	1.6			
Rubber & Plastics	7.1	13.0	225.2	3.9	3.2			
Commercial Services	9.4	10.8	5 686 2	6.7	0.2			

<sup>\*</sup> It must be noted that some industries, such as clothing and textiles, still face to a degree certain quantitative restrictions and/or regulations which may limit the potential market in the U.S. which is available.

Source: Industry Canada compilations based on data from DRI and Statistics Canada (Transportation Services exports based on international services transactions receipts)

For further detail, please see Slide N-10.

Nontraditional export areas or niches include industry exports from areas in which Canada has been a net world importer. These exports' success relies frequently on competitive advantage originating from productive and innovative activities, and benefit from special market access to the U.S.



#### ...as do exports in new and emerging areas

Technological developments have resulted in many new or evolving industries, whose markets are growing fast. At present, the U.S. market dominates world demand for many of these leading-edge products and services. Five key sectors include:

- Biotech

Biopharmaceuticals

**Bio-agriculture** 

Bio-aquaculture

**Bioforestry** 

- Information Communication Technologies (ICTs)
  Information appliances
  Intelligent systems and software
  E-commerce facilitators
- Aerospace Technologies
  Regional and business aircraft
  Flight simulators and training
- Environmental Technologies
  Energy (fuel cells, biomass, etc.)
  Bioremediation
- Professional Services

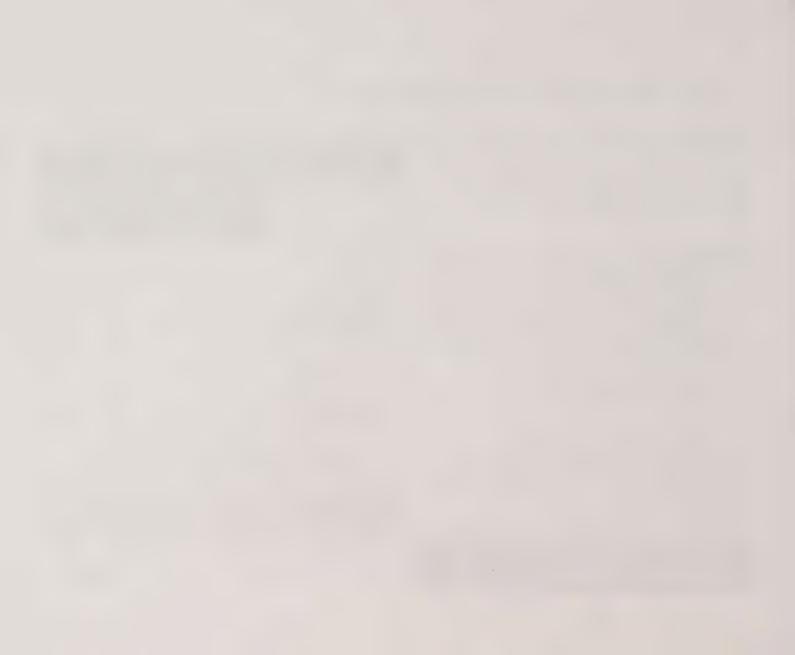
Success of companies in these industries depends often on their ability to keep up with rapid innovations in products and/or processes.

## Select Canadian exports to the U.S. associated with leading-edge activities

		Annual Growth, % 1989-1998	US\$ Billion 1999	Annual Growth, % 1989-1999	Our Share of U.S. Market, % 1998
Pharmaceuticals	0.7	29.4	133.6	10.4	0.5
ICTs Telecom Equipment Electronic Parts & Components Computers & Peripherals Scientific & Professional Equip Indicating & Recording Instrum	3.1 3.2 3.6 1.6	19.8 9.3 10.1 15.7 15.0	91.4 171.8 170.5 133.6 24.4	9.2 11.2 9.9 3.8 5.1	3.8 2.1 2.3 1.3 7.1
Aerospace	4.5	10.8	79.5	1.2	5.2
Environmental Technologies*	0.4	19.0	n/a	n/a	n/a
Business & Professional Services Management Consulting Computer Services Architecture & Engineering	9.4 0.7 0.7 0.6	11.0 11.8 13.3 16.2	1,497 148.4 301.6 116.8	7.7 8.5 12.9 4.6	0.7 0.5 0.3 0.5

\* 1990-98 time period - export data come from Team Canada Inc. Source: Industry Canada compilations based on data from U.S. International Trade Commission, DRI and Statistics Canada (Business & Professional Services exports are based on international services transactions receipts)

New or emerging activities frequently involve young industries in which there are a high proportion of new firms. Markets can be very active and the nature of competition can change as markets develop. Positioning, staying on the leading-edge, and taking advantage of opportunities quickly can be crucial to the growth and export success of firms in these industries.



#### Opportunities also include the export of many knowledge services

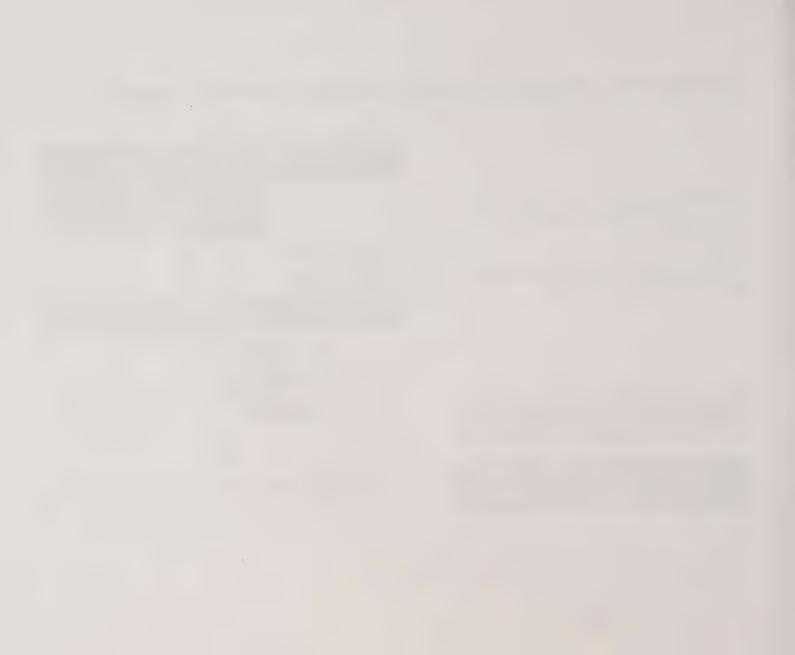
Knowledge services play a crucial part in the efficient operation and growth of modern economies.

Consequently, business & professional services are growing rapidly.

Business & Professional Services range from relatively low-tech building services to cutting-edge knowledge services. These include computer services, R&D, and Management Consulting.

Services are an integral part of the global, knowledge economy.





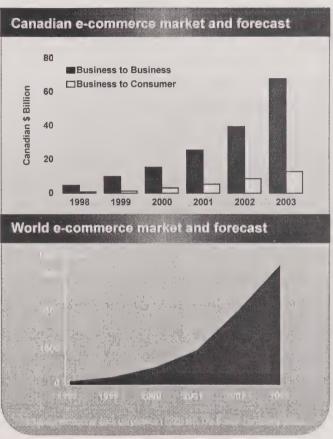
#### E-biz could provide exceptional opportunities...

A significant feature of our new global and information-driven environment is the growth in e-commerce.

Canadian e-commerce is growing fast and is projected to continue to do so.

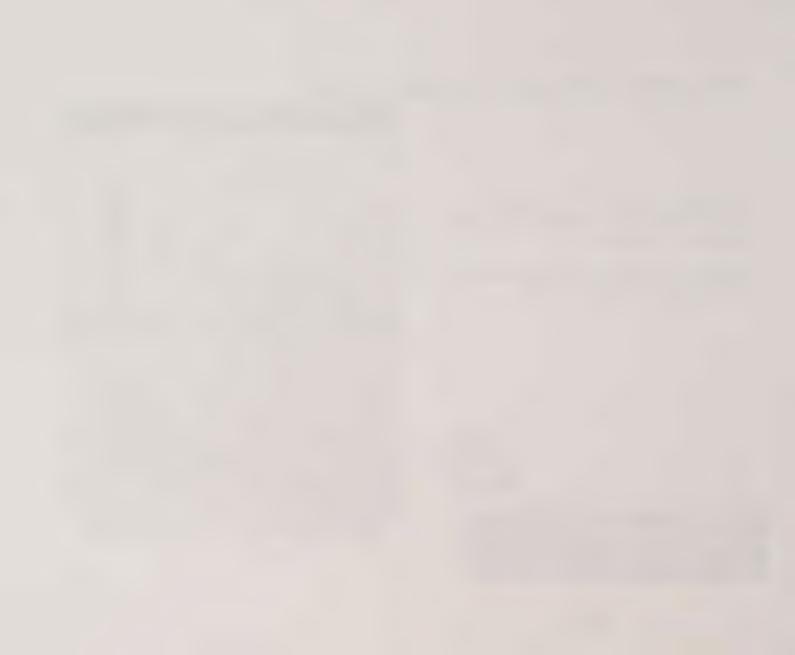


Although e-commerce is still in its infancy, we should see it accelerate dramatically in importance.



E-biz will impact on a substantial part of everyday activity, from retail to trading relationships.

M-9



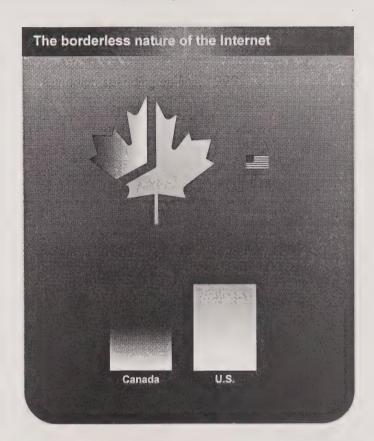
#### ...for Canadian business getting on the info-highway...

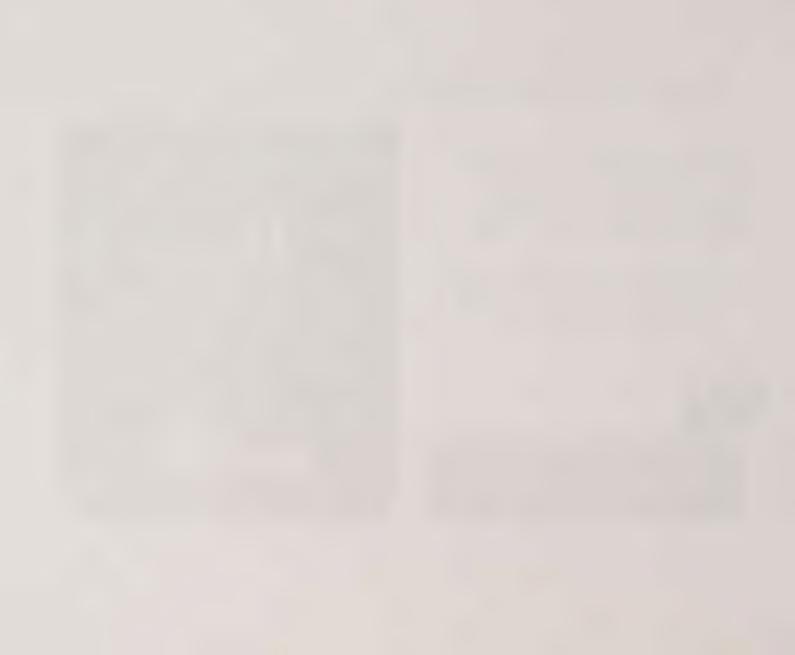
Canadians are spending a lot at American sites. Excluding financial transactions and travel-related online purchases, Canadian consumers spent 63% of their online dollars at U.S. Websites in 1999.

 And only 26% of Canada's 200 largest retailers offered Web-based shopping last year, compared with about 50% of comparable retailers in the U.S.



The Internet is becoming a strategic priority for a growing number of Canadian businesses.





# ...and signs are Canadian business is beginning to take advantage of e-commerce

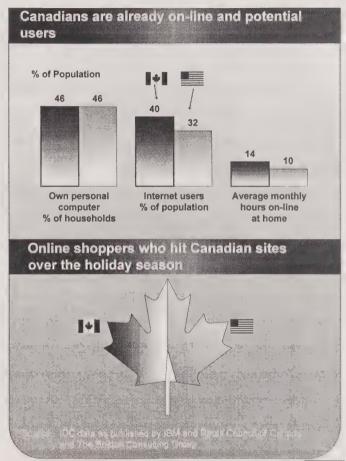
While Canadian companies may have dragged their feet in e-commerce, partly because they felt the domestic market was not large enough to justify the expense, they are recognizing the U.S. market beckons.

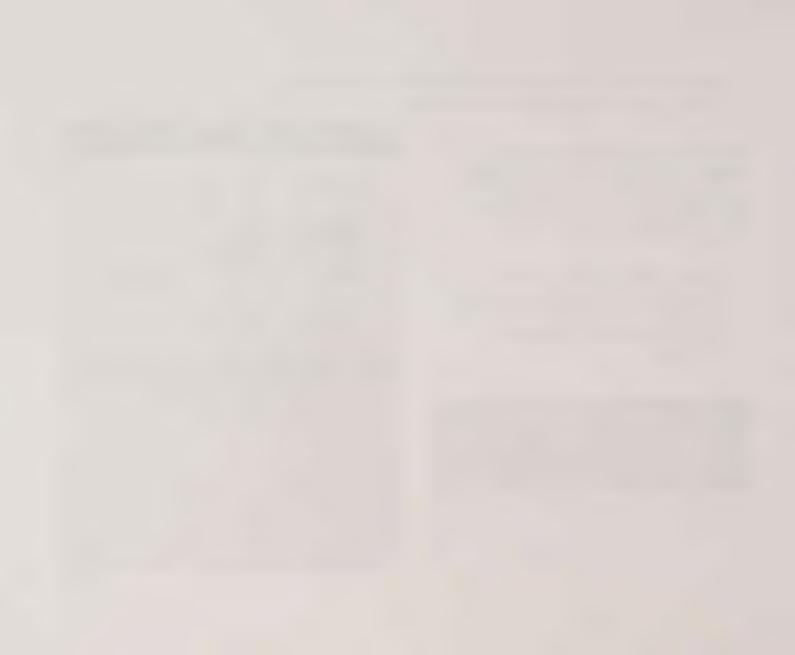
 Indeed, almost half of the online shoppers who hit Canadian sites over the holiday period originated from the U.S. and another 5% from other countries.

To take advantage of opportunities in e-commerce, Canada will need to accelerate the transformation of existing businesses and foster e-business creation and growth.

"In Canada a year ago, U.S. companies had 100% of the online book business, but today we believe Chapters has repatriated 40% of the money that has gone South."

Rick Segal, President of Chapters On-Line Wall Street Journal, Jan. 31, 2000

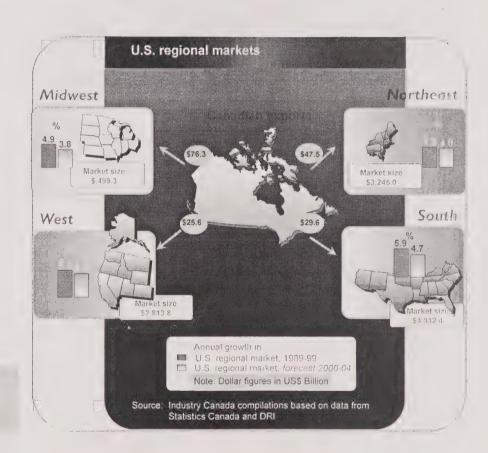


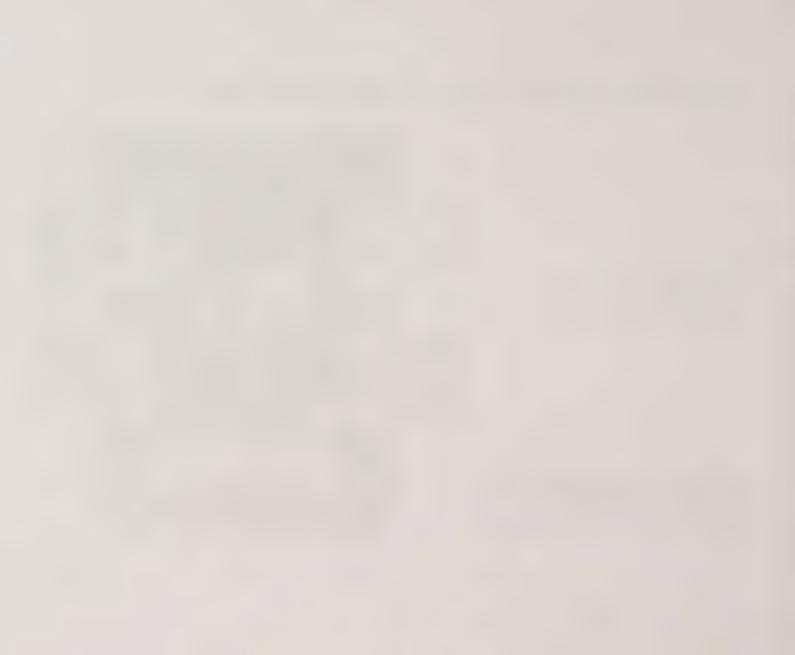


## Opportunities can be found in all regions of the U.S.

Opportunities extend throughout the U.S., reflecting the growth and needs of individual regional markets.

Please see: Annex: Opportunities and U.S. Regions for a fuller discussion of regional opportunities.





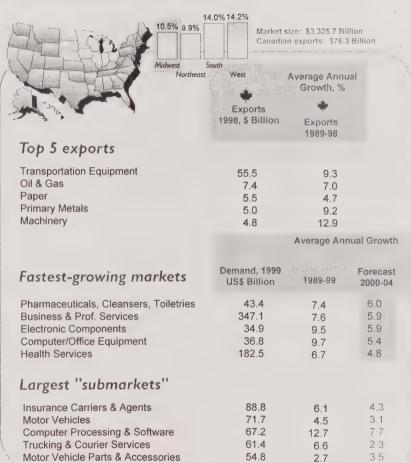
#### Our exports are strongest to the Midwest...

The Midwest is the largest U.S. destination of Canadian exports (\$76.3 billion in 1998) — and are mostly in traditional areas of strength: especially Autos, but also Oil & Gas and Paper.

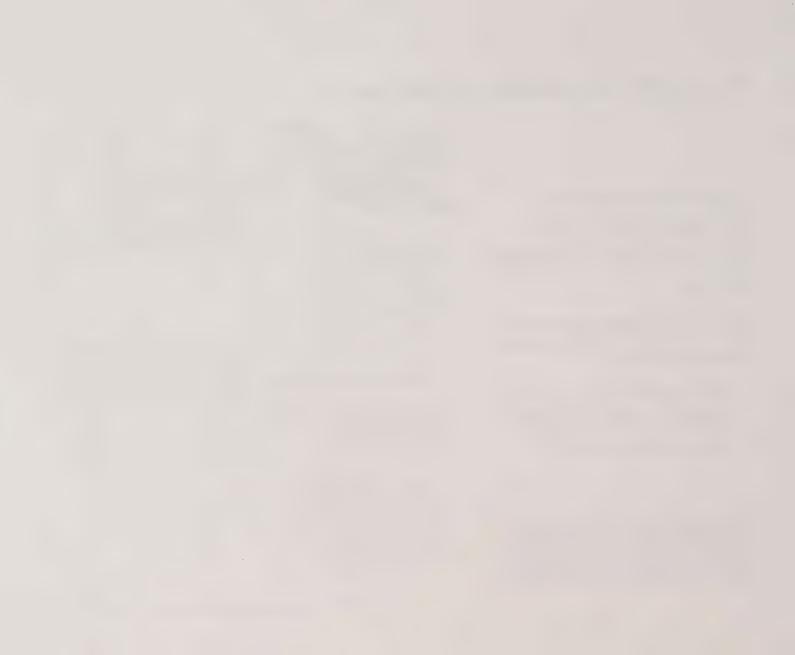
However, the <u>fast-growing</u> markets in the Midwest are in "high-knowledge" products and services.

- This includes business services (especially computer processing and software), pharmaceuticals and computer equipment.

DRI provides market information on 54 Groups and 249 Sectors. The above market information comes from Group data, and "submarket" information comes from Sector data. We focus on non-banking Groups and Sectors in which there is trade.



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...and in the Northeast, high-tech exports have been increasing at a fast pace

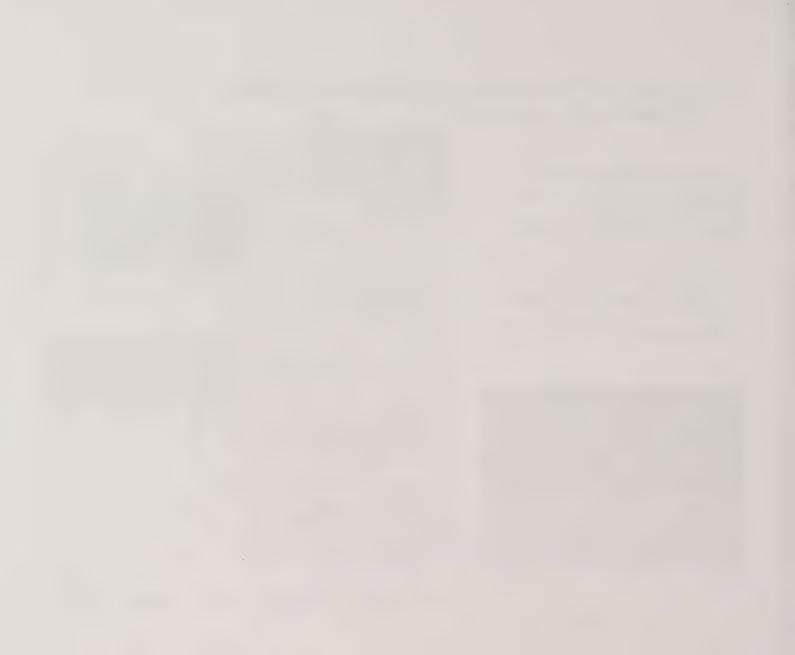
Autos also comprise the main share of Canada's exports to the Northeast, but exports of Electrical & Electronics is poised to overtake the top position.

 In fact, the Northeast market for Electrical & Electronics exports is over twice as large as in any other region.

The Northeast's markets for high-tech products such as Electronic Components, Pharmaceuticals, Computers and Aerospace and Business Services are forecast to continue to grow fast.

DRI provides market information on 54 Groups and 249' Sectors. The above market information comes from Group data, and "submarket" information comes from Sector data. We focus on non-banking Groups and Sectors in which there is trade.

har all		Average Annua Growth, % ••• Exports 1989-98	
Transportation Equipment Electrical & Electronics Primary Metals Paper Food  Fastest-growing markets	11.9 10.5 7.3 5.9 3.7 Demand, 1999 US\$ Billion	5.3 16.9 6.6 5.7 10.4 Average Annu	Forecast 2000-04
Electronic Components Business & Prof. Services Pharmaceuticals, Cleansers, Toiletries Computer & Office Equip. Aircraft & Parts	32.6 347.2 47.6 35.0 13.7	8.3 6.5 7.0 7.4 0.1	7.0 6.1 6.0 5.5 5.1
Largest "submarkets"			
Insurance Carriers & Agents Computer Processing & Software Motor Vehicles Advertising Trucking & Courier Services	92.8 73.4 69.9 47.9 44.2	5.2 12.1 3.3 4.3 4.8	<b>4.1</b> 8.0 3.0 4.4 2.2



### Canada's exports have risen quickly to the fast-growing South

The South led all U.S. regions in recent market growth. And while the South comprises the smallest share of Canada's exports to the U.S., our exports are rising rapidly (14.0% annually, second only to the West's 14.2%).

Autos and Aerospace are among our key exports, but the greatest opportunities are once again in business services, electronic components and computers.

Rising demand for semiconductors, computer processing and aerospace top the South's market forecast.

DRI provides market information on 54 Groups and 249
Sectors. The above market information comes from
Group data, and "submarket" information comes from
Sector data. We focus on non-banking Groups and
Sectors in which there is trade.





#### Export opportunities will be particularly strong in the West

The West is forecast to overtake the South and lead the U.S. in market growth.

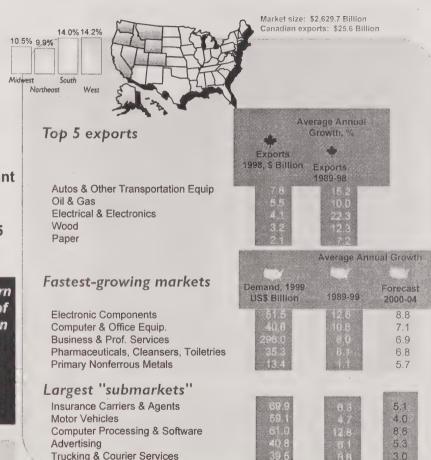
To some degree, exports to the West reflect the structure of the Western Canadian economy, with Oil & Gas exports occupying a relatively important share.

- But Computers are among our top 5 exports, as are Aerospace exports.

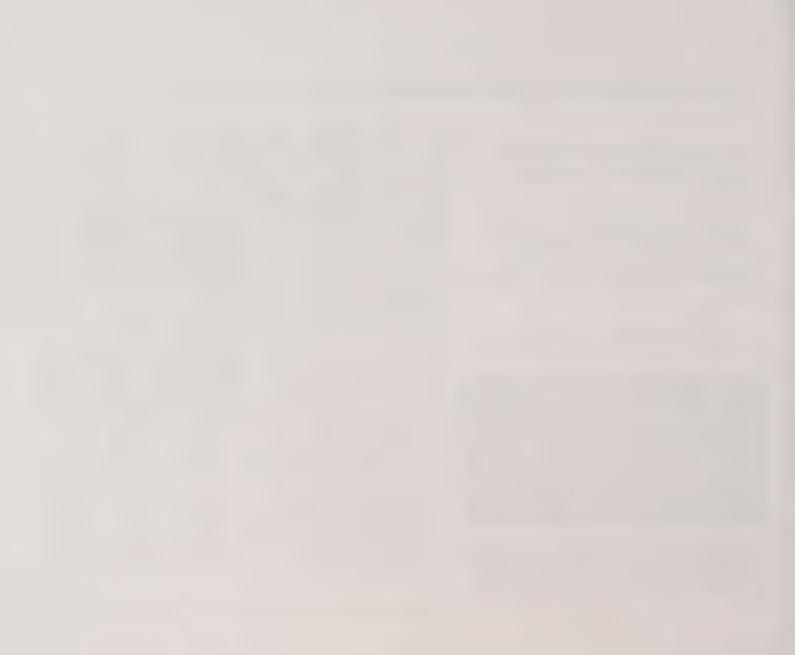
The West's future is being built on a modern infrastructure that in addition to the type of exports we presently deliver, requires even greater amounts of higher knowledge goods and services. The West's market forecast highlights growing demand for Electronic Components, Computers, Business Services and Pharmaceuticals.

DRI provides market information on 54 Groups and 249 Sectors.

The above market information comes from Group data, and
"submarket" information comes from Sector data. We focus on
non-banking Groups and Sectors in which there is trade.



Source: Industry Canada compilations based on data from Statistics Canada and DRI



#### Canadian export of services...

The U.S. markets for services are large and growing. International travel and a variety of other services exports have grown greatly.

- The value of Canadian service exports to the U.S. are highest in travel services and in land transportation (which includes trucking).
- But Insurance and R&D exports are also significant.

The fastest growing areas of Canada's exports of services to the U.S. include several knowledge services — including Architecture & Engineering, R&D, and Computer & Information.

It must be noted that many service industries face rules and regulations which may limit the potential market in the U.S. which is available.

The fastest growing U.S. service markets are in knowledge areas — Computer & Information, Management and R&D.

and the second s	Experts	A	verage Ani	nuai Gro	wth	
	1998 US\$ Billion	Exports 1989-98	LIS Market 1999 US\$ Billion			
rensportation						
Waiter ★ Air	0.3	2.0	16.8 133.4	4.8	3.6 5.7	
* Land & Other	2.0	11.7	258.8	5.6	2.6	
T CALL A CALLET	4.0	12.9	230.0	- **	4.0	
revel	5.8	8.6	67.1	6.0	5.7	
Commercial						
communication	0.8	5.4	364.8	5.9	5.0	
surance	17	11.1	368,1	5.9	4.7	
ther Financial	0.5	14.8	685.8	9.3	5.9	
Computer & Information	0.8	13.6	301.6	13.32	. 0	
			The second second	5.9		
quipment Rentals	0.1	2.4	45.2	8.4	3.6	
lanagement	0.9	12.3	148.4	5.4		
dvertising	0.1	12.8	211.9	8,1	4.7	
(&D	100	13.0	46.7	4.5	0.0	
rchitecture & Engineering	0.6	16.4	116.8	7.2	4.3	
liscellaneous Business	1.4	6.3	623.0		8.4	
ersonal, Cultural & Recreation	on 0.1	2.5	796.2	5.9	3.9	

Trade information is generally available for merchandise trade. However, service industries are growing tremendously in importance. For information on services exports we rely on data on Canada's international services transactions receipts to the U.S. (U.S. regional break-outs are not available)



#### ...show great potential in all regions of the U.S. market

The forecast is for continued strong growth in knowledge services like R&D, Management and Computer Services across all regions of the U.S.

Canada must capitalize on the growth potential of services exports.

The forecast areas of high growth in the U.S. service markets are in knowledge areas — and growth potential, while high in the South and West regions of the U.S. is also significant in other regions.

	Market		Market		Market		Market	
			Market Service	***				
Transportation							1.00	
Water	3.5 29.9	2.6 5.2	#.2 44.8	3.4 6.1	3.7 31.5	2.7 5.1	3.3 27.2	3.2 6.1
Air Lime & Other	15.9	3.7	44.8 25.2	4.4	19.1	3.5	13.2	4.8
20131-2011-2	10.0	3.7	45.4	4.4	15.63	3.5	13.4	4.0
Travel	14.3	5.1	23.7	6.2	15.3	5.3	13.9	6.1
Commercial			-					
Communication	90,8	4.6	116.7	5.3	84.4	4.6	72.9	5.4
Insurance	92.8	4.1	116.6	5.2	88.8	4.3	69.9	5.1
Other Financial	182.7	5.8	214.9	6.1	155.5	5.3	132.7	6.2
Computer & Information	73.4	8.0	99.9	8.6	67,2	7.7	£1.0	8.8
Equipment Rentals	10.2	3.4	16.9	4.0	11.7	3.1	9,5	4.4
Management	33.4	6.9	51.7	7.7	34.3	6.8	28.9	7.8
Advertising	54.7	4.4	71.1	4.9	52.0	4.2	40.8	5.3
R&D	11.4	5.8	15.8	6.5	9.6	5.6	9.9	5.9
Architecture & Engineering	23.6	4.1	43.6	4.5	26.1	3.8	23.6	4.9
Miscellaneous Business	147.2	6.0	207.2	6.7	146.2	5.9	122,3	6.9
Personal, Cultural & Recreation	191.3	3.3	256.5	4.3	181.7	3.4	166.7	4.3

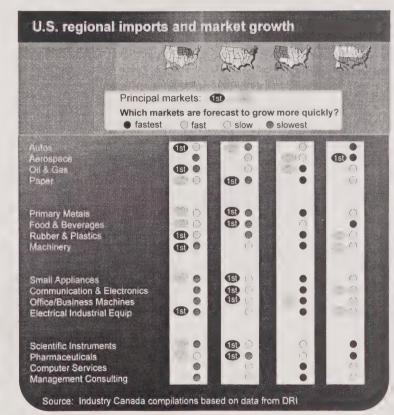


# The West and South are forecast to have the quickest-growing import markets for Canadian products and services!

As Canada's economic relations with the U.S. grows, and industry exports expand beyond principal or traditional U.S. regional markets, we should see "secondary" markets continuing to grow quickly.

And while the largest markets of most industry exports are in the Midwest and Northeast, markets in the South and West are forecast to have faster growth.

Many of industries' biggest opportunities, in terms of growth and value, are in geographic markets that are nearby — in the Northeast or Midwest. But much promise lies in the West and South.





How can we take better advantage of our opportunities in the U.S.?





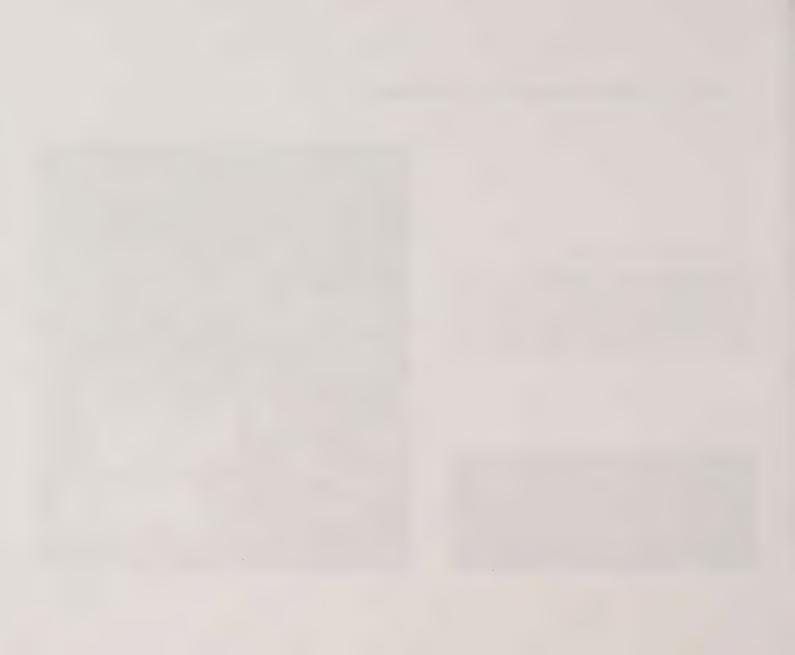
### Taking full advantage of opportunities...

#### Opportunities are there:

- But how to take advantage?
- And which ones will be most important to our future?

It is necessary to realize, firstly, that we need to take advantage of opportunities, and to do so requires some readiness on the part of business





#### ...begins by recognizing Canadian business cannot stand pat...

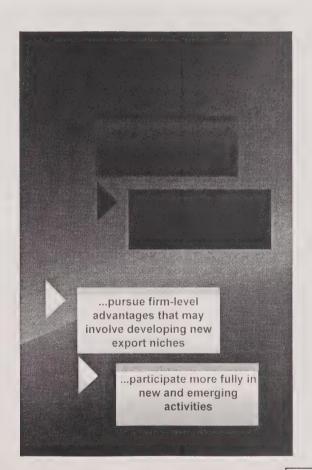
For many firms who are first-evers and new-to-market when it comes to exporting:

 They will find they cannot afford to be just "almost as good" as their competitors in U.S. markets — for sustainable success they must continuously find ways to be better.

#### For firms linked to MNCs:

- They will need to make corporate decision-makers notice the abilities and merits of Canadian operations versus competing operations

The world is changing, requiring a forward-looking and global outlook on the part of business, and new ways of doing business. Without these, Canada's existing in-roads may erode over time.





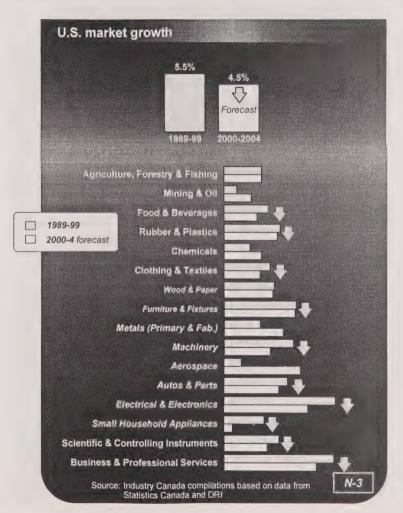
### ...and by realizing there is no "status quo" option...

Canada's export expansion into U.S. markets in recent years has benefitted tremendously from a buoyant U.S. marketplace.

But the U.S. economy is forecast to slow slightly, which will lead to stronger competition in U.S. markets.

This will especially be true in non-resource areas, where Canada does not have industry-level comparative advantages.

 In these areas, Canada will need to rely on firm-level advantages based on innovative practices and highly productive and unique processes and products/services for success.



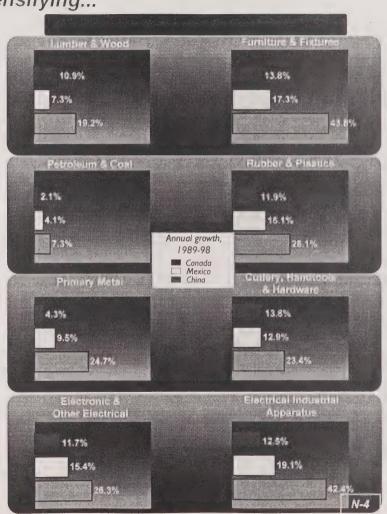


...rather, competition will be intensifying...

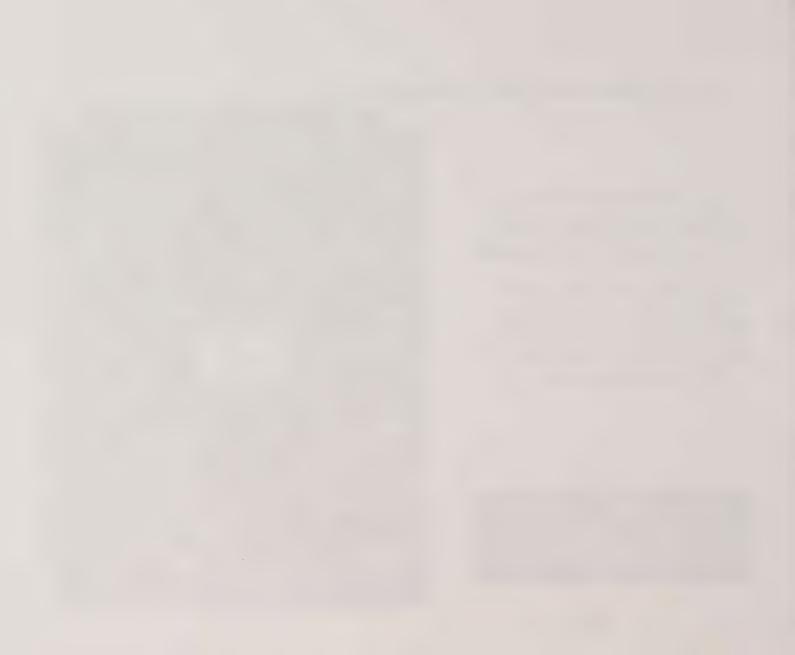
Other countries' businesses are making rapid in-roads, <u>especially</u> in more value-added portions, including in Canada's traditional export markets.

For instance, even though Canada's exports to the U.S. are increasing, exports from Mexico and China are generally growing much more quickly, and particularly fast in segments requiring greater processing.

There are rumblings on the horizon that attest to the emerging export strength of competitors which could threaten our current position in U.S. markets.



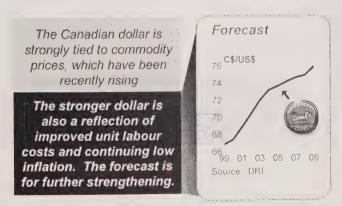
Source: U.S. International Trade Commission

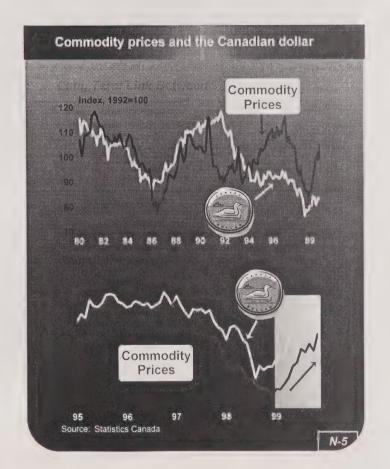


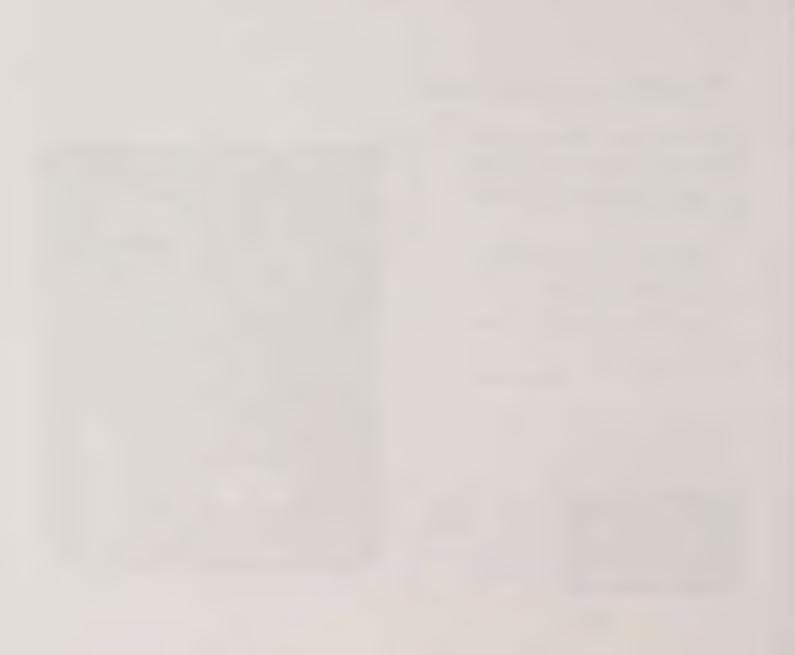
#### ...threatening our current "edges"...

What we might also consider as current factors behind Canada's recent success in U.S. markets, such as having the U.S. as a next-door neighbour and having a lower dollar, are losing impact.

- Globalization and the information revolution result in Canada losing some relative advantages from proximity. It is easier for other countries to learn about and access the U.S. marketplace.
- As well, our dollar is strengthening.







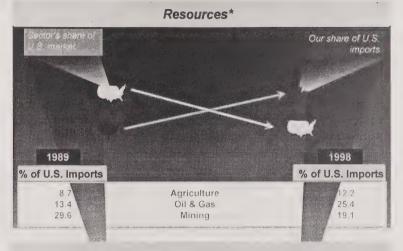
#### ...even in Canada's traditionally-strong export pursuits

Resources remain a strong export sector. But they comprise a declining share of the total U.S. market.

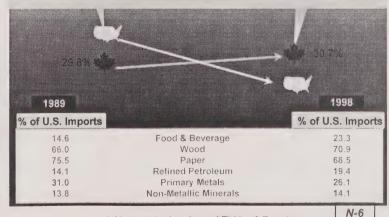
This means Canadian industry must move into more value-added, and knowledge-intensive segments.

However, foreign exporters are also moving up the value-added ladder.

The future lies in moving up the value-added ladder.



#### More value-added resource-based activities



\* Also includes Logging and Fishing & Trapping Source: U.S. International Trade Commission

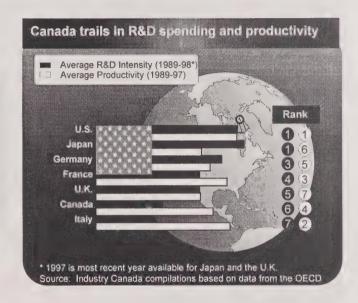


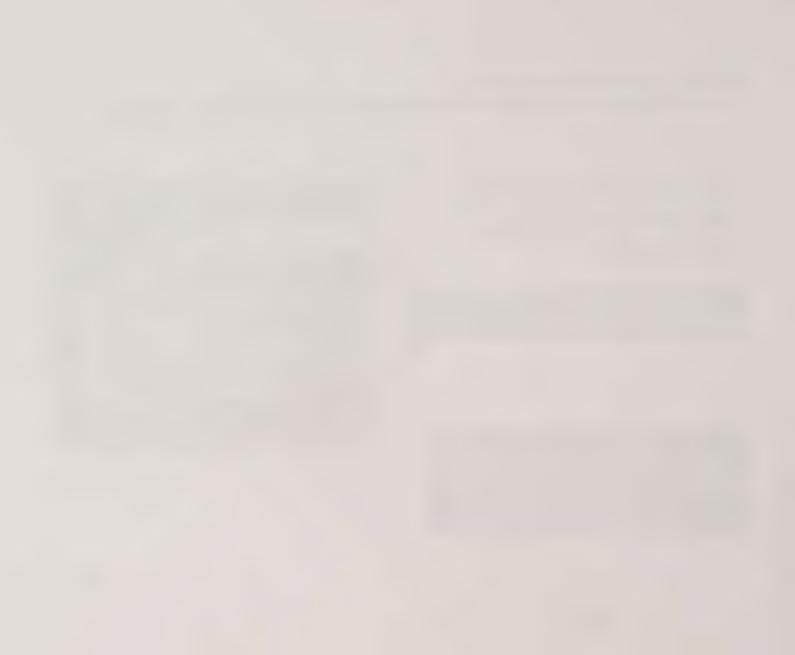
## Indeed, the world is changing, requiring the pursuit of new "essentials" for business success...

The future will be with countries with businesses that attest to speed, quality, better product features and better processes — the new "essentials" for business success.

This will depend on being more innovative and productive.

These new "essentials" transcend resource endowments and the benefits of proximity. Rather they place a premium on ideas and innovation, and their beneficial impact on productivity to sustain business success.



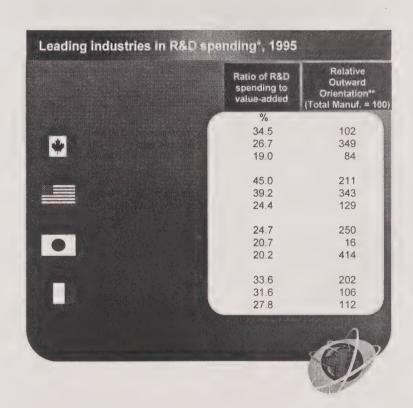


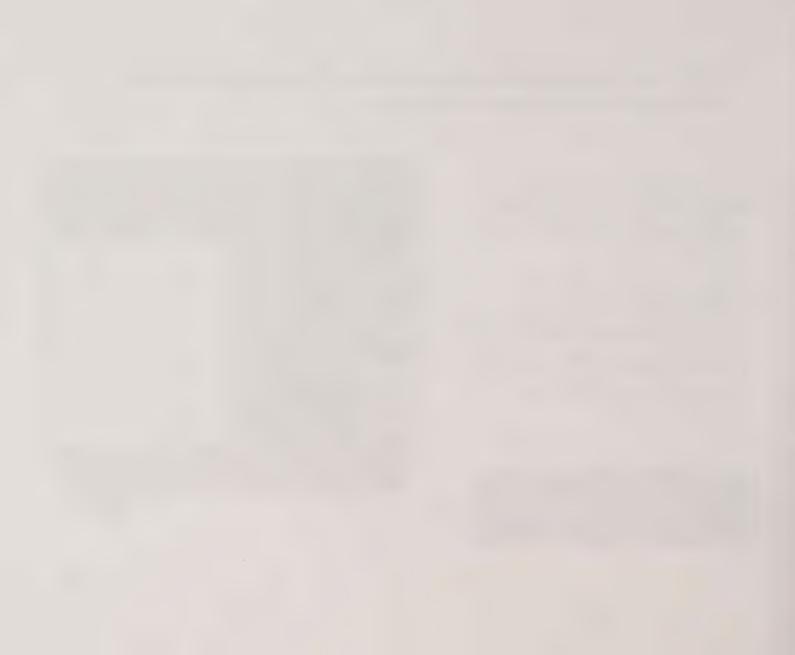
## ...by forward-looking and outward-looking firms and industries that focus on being more innovative

Firms in forward-looking industries are always looking for new ways to make, customize and add more value to their products and services.

And it is vitally important to be outward-looking, because forward-looking firms need large markets to undercut the high costs associated with R&D and other expenses linked to knowledge activities, and to better reap the benefits of specialization and economies of scale.

In many countries, the leading R&D industries tend to show above average outward orientation.





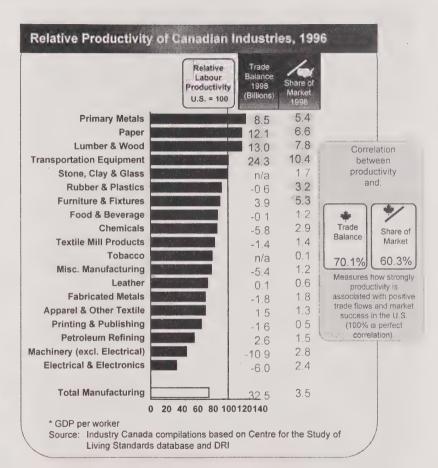
### Some of our exports reflect higher-than-U.S. productivity...

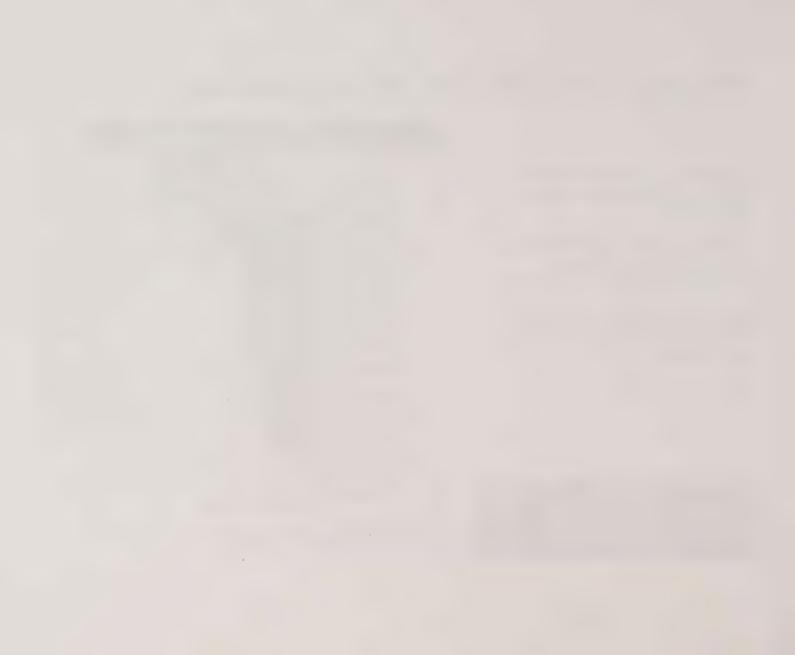
In many of our traditional export areas, Canada is more productive than the U.S.

 Plus, Canada is as productive as the U.S. in the important Transportation Equipment sector.

But in most industries, and across all aggregate sectors, Canada lags badly behind the U.S.

Canada's share of the U.S. market is relatively high in many areas in which Canada is relatively more productive.





### ...and Canada's growing success in niche markets...

Success in many niche markets reflects the efforts of individual firms and particular sub-industries.

These efforts must be sustained for firms to <u>remain</u> competitive and to successfully evolve with markets.

Otherwise, firms have a natural tendency to "slip down the business food chain".

Select industry niche	exhorm	- BIIU	phaciai	seymo	ins ,
	US\$ Million 1998	Annual Growth 1989-1998	US\$ Billion 1999 1	Annual Growth 989-1999	Our Share o U.S. Market 1998
		**		4	
Clothing	1,455	27.3 50.0 34.1 28.8 26.8			1.1
Textiles	1,210	18.2	_0000000000000000000000000000000000000	1.6	4.4
Furniture & Fixtures	3,697	13.8		5.0	5.3
Chemicals	4,222	19.1 4.3 28.2 18.3 18.2	144.5	1.6	2.9
Rubber & Plastics	7,085	13.0 18.4	Participation of the Contract	3.9	3.00 3.2 2.00 3.2
Commercial Services	9,433	10.0	7,105.4	6.6	0.1
Transportation Services	3,241	8.1	804.4	5.2	0.4
Other					
* It must be noted that man the potential man Source: Industry Canada o U.S International (merchandise ex transactions rece	ket in the U. compilations Trade Comp ports for office	S. which is a based on di mission and	available ata from D Statistics	RI. Canada	

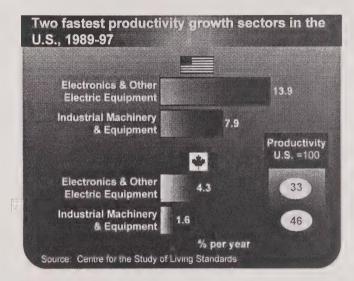


### ...but we are not successful in leveraging some key industries...

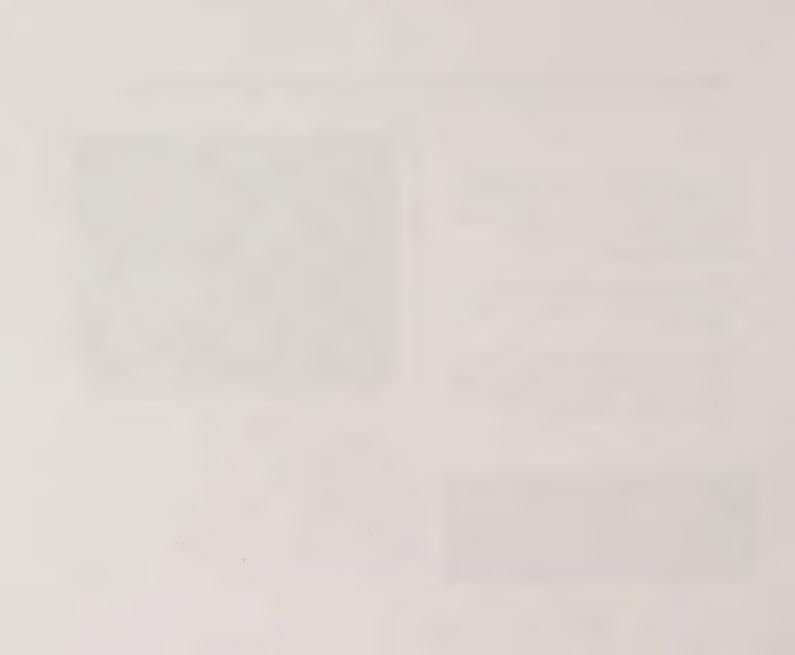
The U.S. economy's enviable productivity performance has been driven by two computer-related sectors — Electronics & Electric Equipment, and advanced Industrial Machinery.

- These two sectors outpaced their Canadian counterparts by more than three times.
- During the last decade, the share of these two manufacturing sectors in the U.S. doubled — while Canada's share increased only marginally.

The U.S. is better at riding the technological wave to growth — its industrial structure shifting much more quickly than Canada's towards dynamic, high growth, high productivity industries.



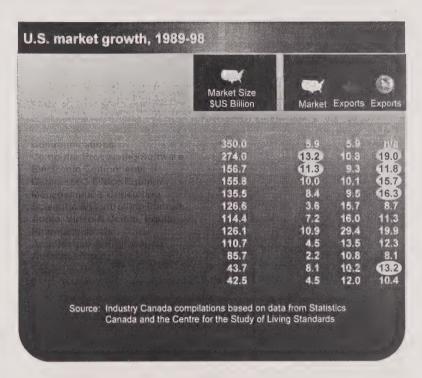
Faster labour productivity growth in the U.S. has been the subject of much current attention. A recent study shows that (total factor) productivity in these two industries has been growing much more quickly in the U.S. Between 1979 and 1995, they contributed to only 17% of Canada's manufacturing productivity growth, while in the U.S. they contributed 57%. Indeed, the performance of these two "industries of the future" explains over 90% of the productivity growth gap between Canada and the U.S. (Wulong Gu and Mun S. Ho, A Comparison of Productivity Growth in Manufacturing Between Canada and the U.S., 1961-95," January 2000).



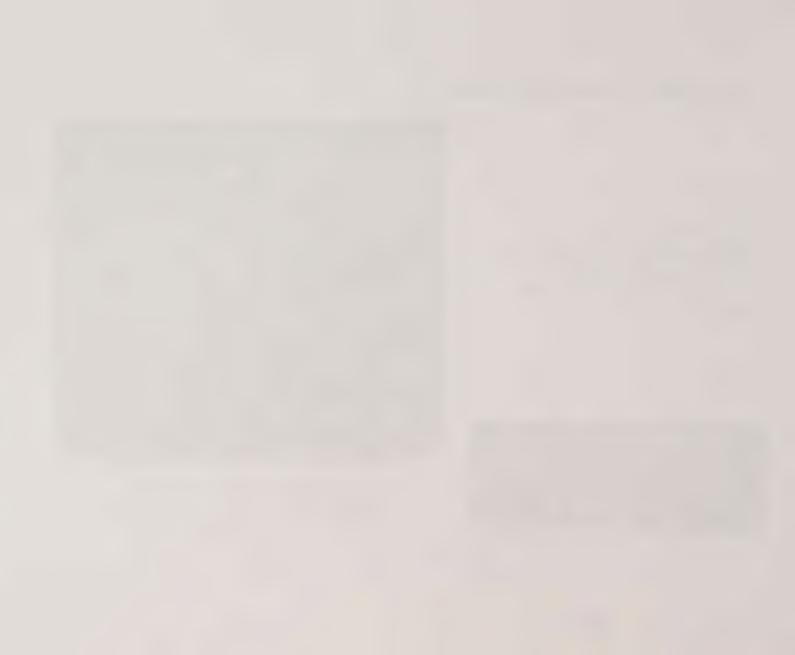
### ...that may be vital to our future

Many of the high-tech or high-knowledge markets in the U.S. and U.S. imports from the world have grown faster than Canadian exports.

In areas of Computer processing, and electronic equipment, Canadian exports are not keeping up with U.S. market growth nor with foreign competitors.



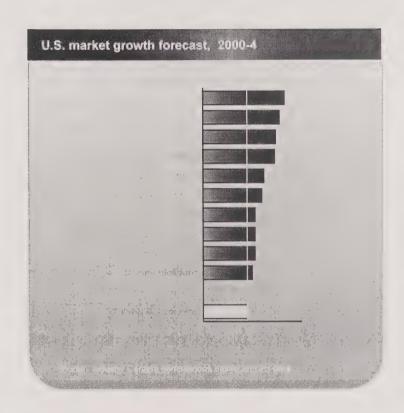
A basic challenge for Canadian businesses in high-tech and high-knowledge areas is to be more competitive than their U.S. counterparts and foreign competitors.

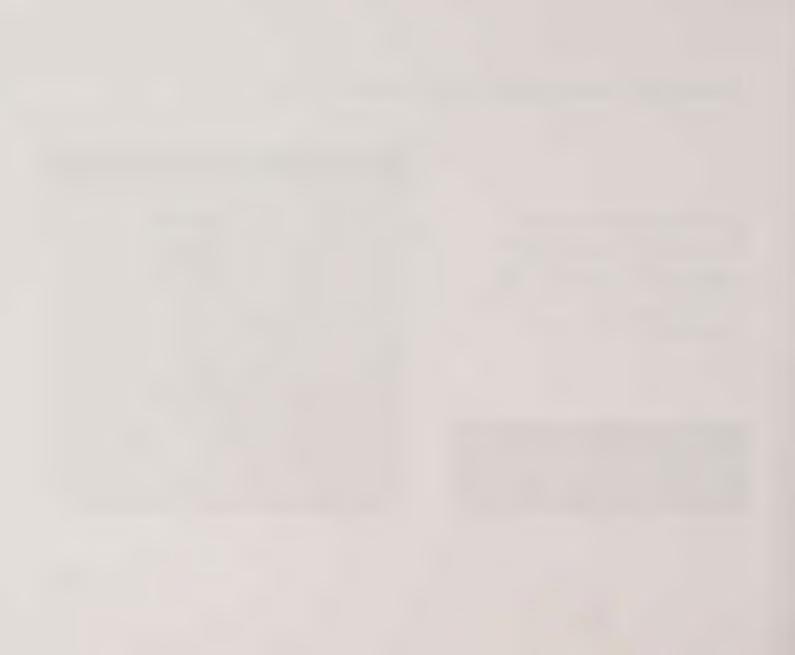


### Indeed, the future bodes well for these industries

Forecasts indicate that the most dynamic U.S. markets will include many of the same sectors which experienced strong growth over the last decade — and which reflect many high value-added and knowledge-intensive activities.

Our future will increasingly depend on taking advantage of opportunities in faster-growing high-knowledge markets.

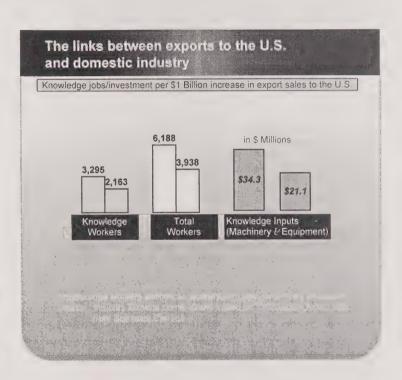


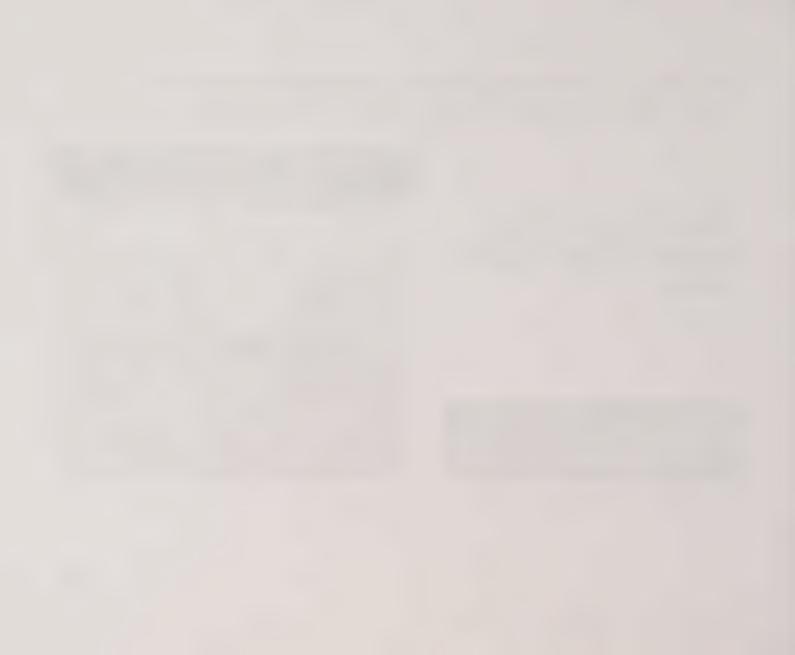


# Still, even our present exports have intricately-important links that stimulate knowledge-use in other domestic sectors...

Our exporting industries' R&D and innovation benefit other sectors by generating new products and processes that can be used to enhance productivity elsewhere.

Many industries that export to the U.S. have stronger than average links to Canada's knowledge-based economy.





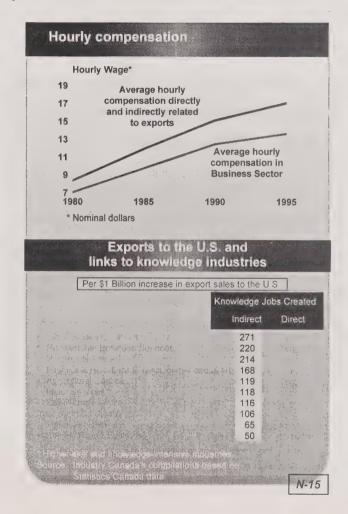
### ...especially our higher-knowledge exports...

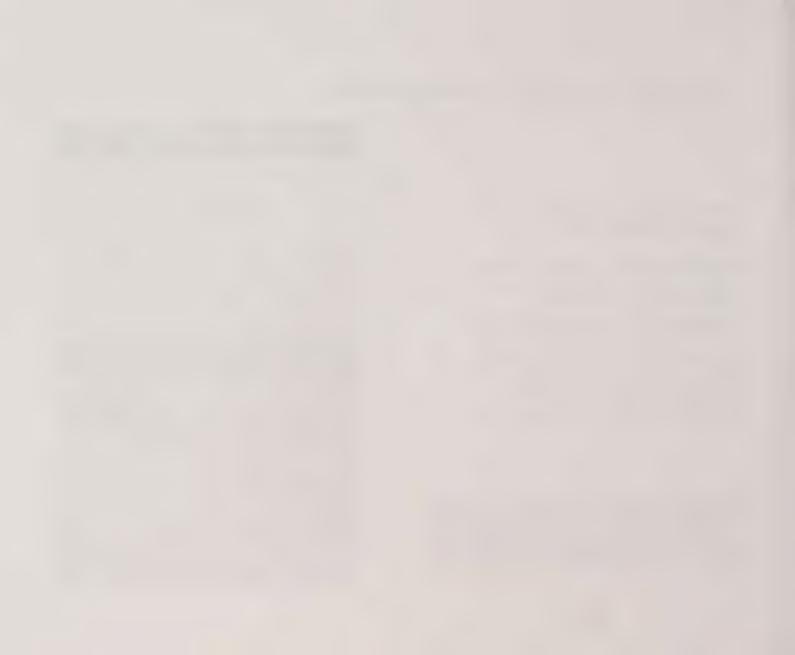
Average hourly pay associated with exports is relatively high.

Export growth also creates a derived demand for domestic inputs, many of which are knowledge-based.

Consequently, Canada's export growth is not only helping to generate many good jobs in exports, but is playing a major role in promoting the expansion of other industries that raise the knowledge-intensity of the economy.

Canada's exports contribute to the growth of many knowledge industries which are critical to the rate of knowledge adoption and technological progress in the economy as a whole — and assist Canada in our transition to a more knowledge-based and forward-looking economy.





### ...which add to our present well-being...

While the U.S. is a leading market for many new products and services, world markets for high-tech and high-knowledge products and services are also growing quickly — and are potentially much larger markets.

If Canada does well in U.S. markets and earns recognition, our firms will be well-placed to take advantage of global opportunities.





# Some key messages





### Opportunities are there! ...

ith globalization, the information revolution and the rising importance of knowledge-based activities, business must, more than ever, pounce on opportunities. And as the world's largest, richest, most dynamic and technologically-advanced market, the U.S. provides an abundance.

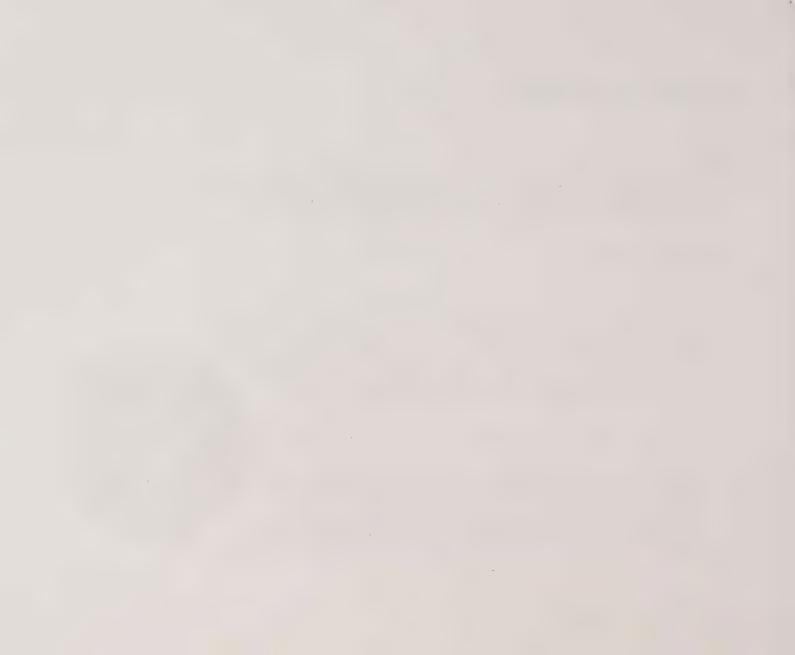
This raises two questions:

How well are we doing?

Canada has had recent success in expanding exports to the U.S. — <u>but</u>: Canada's recent successes are still small relative to the size of the market, and times may become increasingly competitive. The world that Canada confronts in this new millennium will be the most economically competitive in history, and Canada will have to energetically pursue U.S. markets to both maintain present in-roads, and to take full advantage of new opportunities.

And can we do better — can we better maximize our opportunities?

Yes — <u>but</u>: taking better advantage of opportunities means expanding Canada's exports to a wider range of activities, including products and services that could be particularly important for our future prosperity. It also means recognizing the importance of regional markets, and the need to broaden individual industry exports to markets throughout the whole of the U.S.



### ...but how can Canada take better advantage of opportunities?

To take better advantage of opportunities in the U.S., Canada must build on traditional comparative advantages. Nowadays, there is increased importance on inventiveness, productivity, quickness and the general ability to take advantage of opportunities, especially in more value-added and knowledge-intensive activities. Indeed, these are now crucial to sustainable competitive success in all industries — and especially in those which will be most important to Canada's future.

Which opportunities will be most important to Canada's future?

While Canada must continue to pursue opportunities in traditional areas such as resources, it is also crucial that Canada also seek opportunities in new niche and emerging areas that involve greater or higher value-added activities. Opportunities exist across all industries, but high-tech industrial equipment and high-knowledge services are especially associated with future prosperity.

However, success in niche and emerging areas entails developing firm-level competitive advantages that can complement traditional industry comparative advantages. It also requires some readiness on the part of Canadian business, to be outward and forward-looking, and to take steps to be more innovative and productive.

These do not come without the need to address some serious challenges.

In the next issue of the Micro-Economic Monitor, we will feature Canada's Growing Economic Relations with the United States: Part 3 — "Turning Challenges into Strengths".

It will look at special challenges in pursuit of these opportunities, that include breaking into the U.S. market, and maximizing opportunities from knowledge flows – in capital, people and ideas.

Also, it will examine some special considerations, such as Canadian regional concerns — for instance, where in the US do our regions export; what are their key exports; and how these exports are changing.

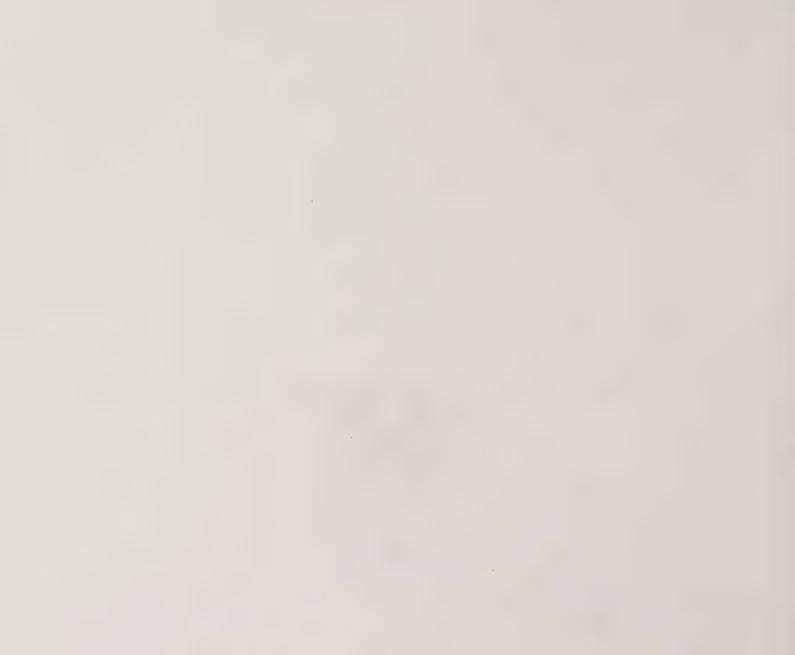


## Annex

— Opportunities and U.S. Regions —







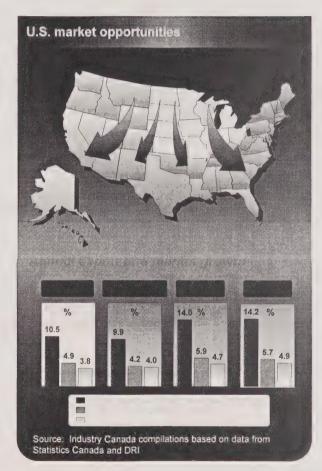
### Opportunities can be found throughout the U.S. ...

### Opportunities exist throughout the U.S.\*

 To take better advantage of these, we must recognize the unique potential that each U.S. region holds.

Our links are strongest with the northern states, but the U.S. West and South are growing faster, and our exports are responding.

This annex focuses on merchandise exports. For additional information on service exports, please see slides M-17 to M-19.





### ...beginning with our key markets in the U.S. Midwest...

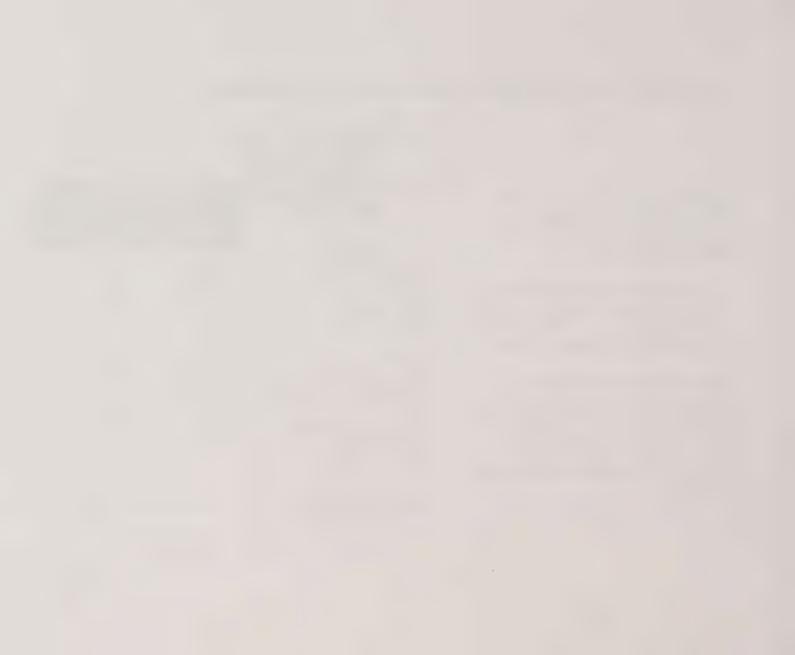
Canada's largest exports are still to the U.S. Midwest. Our exports in recent years have been growing in excess of 10% per year.

- Canada's exports to the Midwest fall mostly under traditional areas of strength, such as Transportation Equipment, Oil & Gas and Paper.

However, growing export areas include Electrical & Electronics and resource-based industries such as food and wood, as well as higher value-added activities such as chemicals, fabricated metals, plastics and furniture.



Source: Industry Canada compilations based on data from Statistics Canada and the U.S. Dept. of Commerce

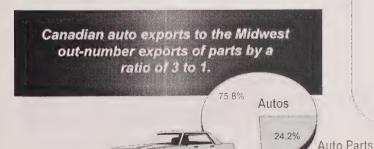


### ...where auto exports dominate...

The integrated North American auto industry has been an important impetus to Canada's large auto exports to the U.S. auto hotbed of Michigan.

As the U.S. industrial heartland, the Midwest imports energy, paper products, and miscellaneous machinery and equipment, as well as primary metals and wood.

But other exports are making a mark, including consumer items such as clothing, soft drinks and pharmaceuticals.



#### Our exports to the Midwest by detailed sub-activity Average Annual Top 5 export Growth. % Exports. sub-activities Exports 1998 \$ Billion 1989-98 Motor Vehicles 39.6 10.5 Motor Vehicle Parts 12.6 5.5 Crude Petroleum 7.4 7.0 Pulp & Paper 4.1 2.1 Misc. Machinery & Equipment 4.0 15.2 Fastest growing export sub-activities Boatbuilding & Repair 54.8% 176.6 85.1 Soft Drink 50.2% 50.0% 35.1 Children's Clothing

Source: Industry Canada compilations based on data from Statistics Canada

48.6%

43.3%

Other Transportation

Equipment

**Pharmaceuticals** 

P-3

279.5

347.3



### ...but high-knowledge markets are growing quickly...

The Midwest's market is expected to show continuing strength.

However, the biggest and fastest growing areas will be in "higher-knowledge" areas.

That is, there will be particularly strong demand for such advanced and "new economy" products and services as pharmaceuticals, business services and computer equipment.

Our current exports are not well-matched with the new market growth areas in the Midwest.

DRI provides market information on 55 Groups and 246 Sectors. The above market information comes from <u>Group</u> data. We focus on non-banking Groups in which there is likely considerable trade.



#### Regional markets and forecast growth



\* Ranked by forecast growth rate from 2000-04.

Source: Industry Canada compilations based on data from DRI



## ...as the region's forecast includes the "new economy"...

The largest increases are expected in computer processing & software, management consulting and pharmaceuticals.

Imports are expected to play a big role in helping to fulfil U.S. demand in its key market growth areas. It would be to Canada's advantage to position itself to provide many of these imports.

Canada needs to exploit fast-growing market segments in the U.S. economy that will open themselves to rising imports.

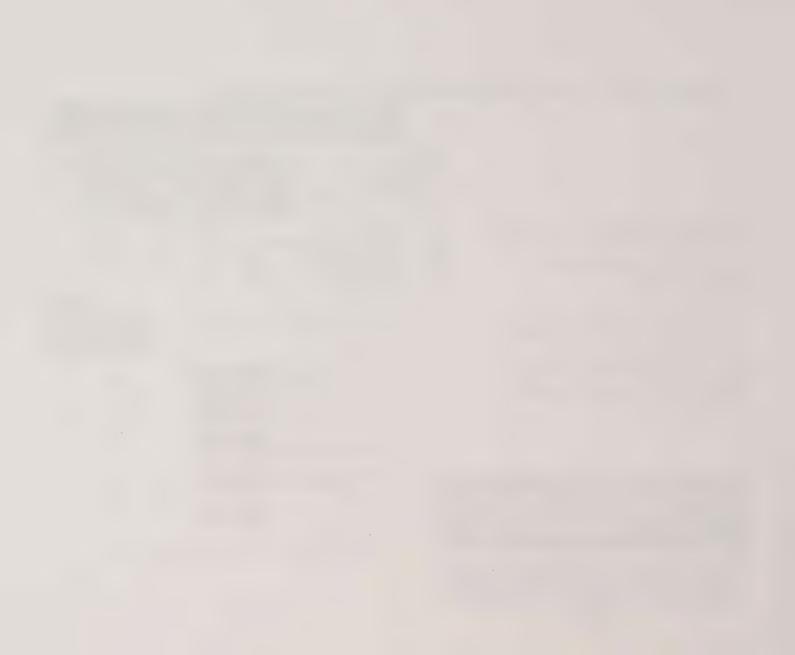
DRI provides market information on 55 Groups and 246 Sectors. The above "submarket" information comes from Sector data. We focus on non-banking Sectors in which there is likely considerable trade.

#### The Midwest's detailed of "submarkets" Average Annual Growth Demand Imports "submarkets 1989-95 2000-04 IS\$ Billion Motor Vehicles 4.5 4.5 Computer Process./Software \$67.2 12.7 7.7 10.7 6.6 2.3 Trucking/Courier Svc's \$61.4 3.0 Motor Vehicle Parts \$54.8 2.7 3.5 2.8 Misc. Plastics \$36.3 3.4 2.9

	Fastest growing "su 2000-2004	ıbmarkets"		Demand 1999, US\$ Billion	in Imports
	Computer Processing & Software		7.7%	67.2	10.7
	Pharmaceuticals	100	7.0%	31.6	10.3
	Management & Consulting		6.8%	34.3	6.9
On A William Common	Radio & TV Broadcasting & Communication Equip		6.7%	10.2	12.1
THE RESERVE THE PROPERTY OF THE PARTY OF THE	Aircraft		6.4%	8.2	5.7

Note: Submarkets of at least US\$ 5 Billion

Source: Industry Canada compilations based on data from DRI



### ...and many additional promising areas for exports



Petro Refining & Related Prods Crude Petroleum & Natural Gas Alumínum Concrete & Gypsum



Apparel from Purch. Material Plastic Materials & Resins Toys & Sporting Goods Office Furniture Toilet Preparations Paints & Allied

Demand	Average Annual Demand		Growth	Our
1999 US\$B	1989-99		2000-04	Presence
24.7	4.3	3.1	5.0	
14.1	2.5	4.1	5.9	•
7.5	6.6	4.8	5.5	
6.5	4.8	5.3	9.3	
5.7	3.4	3.6	5.9	
5.7	3,1	2.4	10.7	



Non-Alcoholic Beverages Agri/Forestry/Fish. Services Soap & Cleaning Preparations

Printing & Publishing \*\*
Engineering & Architecture
Communication Equipment
Meas./Control Instruments

54.7 3.6 2.5 5.7 26.1 4.9 3.8 4.1 21.1 9.5 5.7 9.1 6.4 5.0 1.1 5.4

New & Emerging

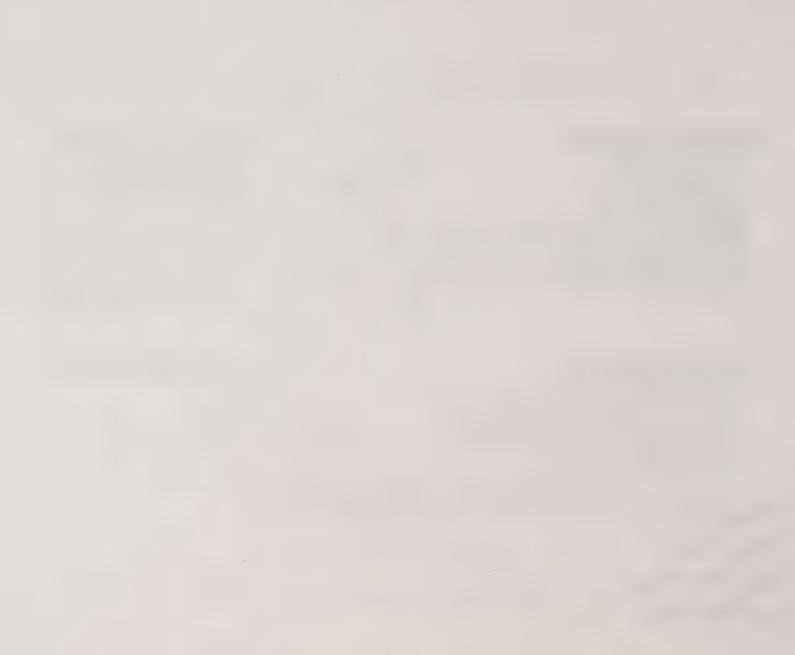
DRI provides market information on 55 Groups and 246 Sectors. The above "submarket" information comes from <u>Sector</u> data. We focus on non-banking Sectors in which there is likely considerable trade.

Please see Slide M-3 for descriptions of Traditional, Value-added Traditional, Niche and New & Emerging

#### Our Presence\*

- High
   Above Avg
   Average
   Low
   Only national info available, see slide M-17
- \* The benchmark value is the share of total Canadian exports in total U.S. market demand (1.5%).
- \*\* Reflect new developments in financial and media industries Source: Industry Canada compilations based on data from DRI

P-6

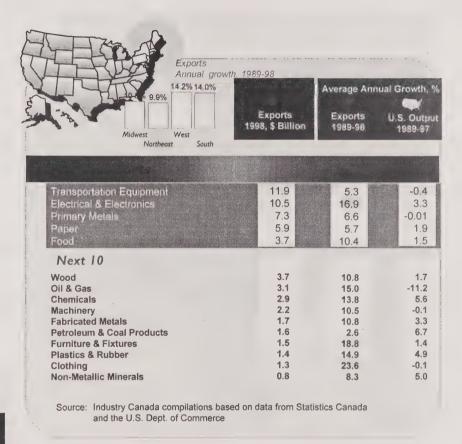


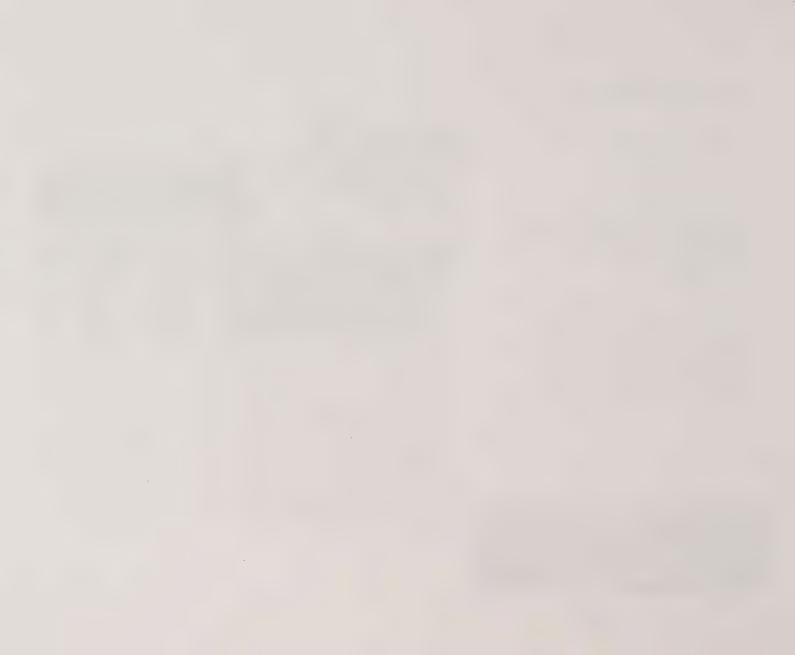
### In the Northeast...

Autos & Other Transportation Equipment account for the largest share of our exports to the Northeast.

However, a burgeoning Electrical & Electronics sector is poised to overtake that position. In fact, the Northeast market for Electrical & Electronics exports is over twice as large as in any other region.

Canada's Electrical & Electronics exports to the Northeast are growing about 5 times more quickly than regional industrial output.





## ...our high-tech exports are growing fast...

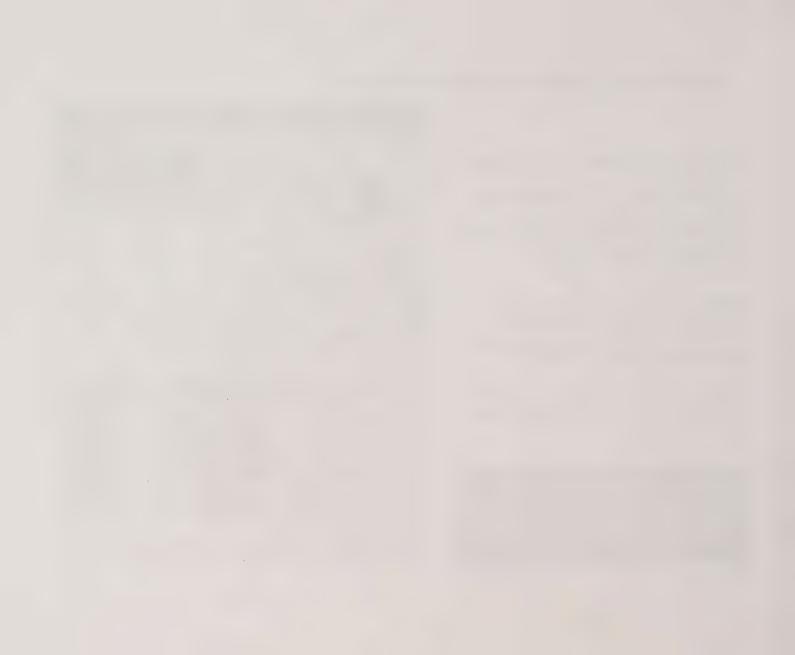
While resource-based industries such as primary metals, paper & food products continue to be an important anchor of our export base, new strengths are emerging in areas of high value-added content, such as pharmaceuticals & clothing.

Within key contributing segments of the Electrical & Electronics sector, Communication & Electronics comprise approximately 50% of exports.

These exports are outpacing the growth in demand for Oil & Gas, and are <u>twice</u> as large in value.

Motor vehicles are still king, and resources remain important. But a new coronation is on the horizon — Communications & Other Electronics exports are rising rapidly.

#### Our exports to the Northeast by detailed sub-activity Average Annual Top 5 export Exports. Growth, % sub-activities Exports 1998 \$ Billion 1989-98 Motor Vehicles 8.7 4.5 Communication & Electronics 6.2 18.6 Non-Ferrous Smelting & Refining 5.2 6.1 Pulp & Paper 4.6 3.7 Crude Oil & Natural Gas 3.1 15.0 Office/Store/Business Machines 2.8 14.8 Fastest growing export sub-activities 1908 S M.H. on Men's and Boys' Clothing 33.1% 28.1% Jewellery & Precious Metal Pharmaceutical & Medicine 28.1% 349.9 Soap & Cleaning Compounds 26.1% 87.1 25.1% Paper Box & Bag Source: Industry Canada compilations based on data from Statistics Canada



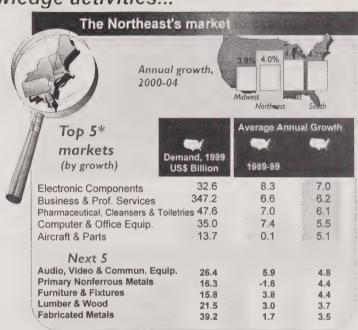
## ...reflecting brisk demand for knowledge activities...

Demand for Electronic Components and other knowledge goods and services is growing faster than for any other sector — and considerably faster than the regional average.

While our exports still largely reflect the strength of our auto sector and many resource-based activities, their markets and market growth will be smaller than for high-knowledge products and services.

the markets of greatest growth are increasingly based in high-knowledge activities, while we still export in lower knowledge areas.

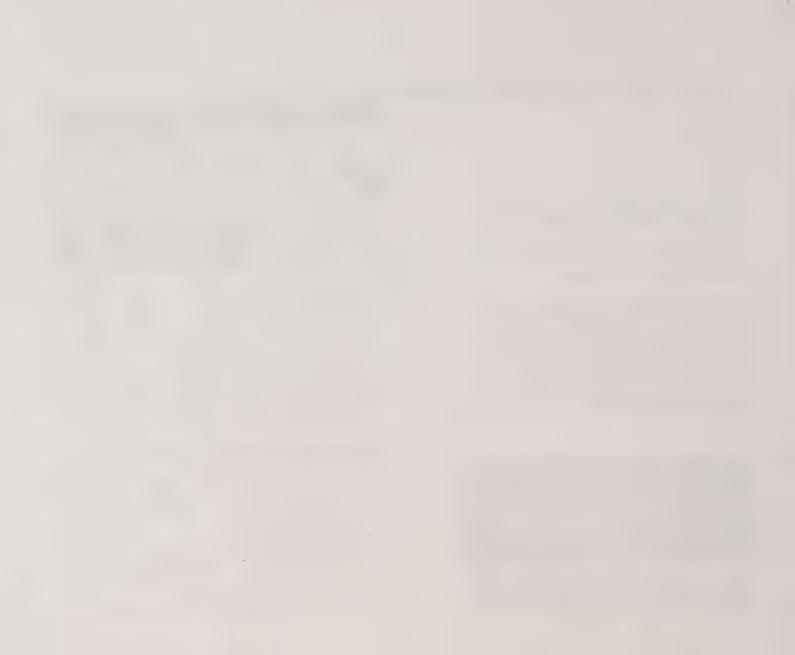
DRI provides market information on 55 Groups and 246 Sectors. The above market information comes from <u>Group</u> data. We focus on non-banking Groups in which there is likely considerable trade.



## Regional markets and forecast growth



 <sup>\*</sup> Ranked by forecast growth rate from 2000-04.
 Source: Industry Canada compilations based on data from DRI



## ...particularly in knowledge services...

Knowledge services have made strong in-roads in the Northeast.

Computer processing and software is both the largest <u>and</u> the fastest-growing submarket in the region.

Canada must not give up on traditional export strengths, but must also consider ways of exploiting the rapid rise in high-tech and knowledge items and services.

DRI provides market information on 55 Groups and 246 Sectors. The above "submarket" information comes from Sector data. We focus on non-banking Sectors in which there is likely considerable trade.

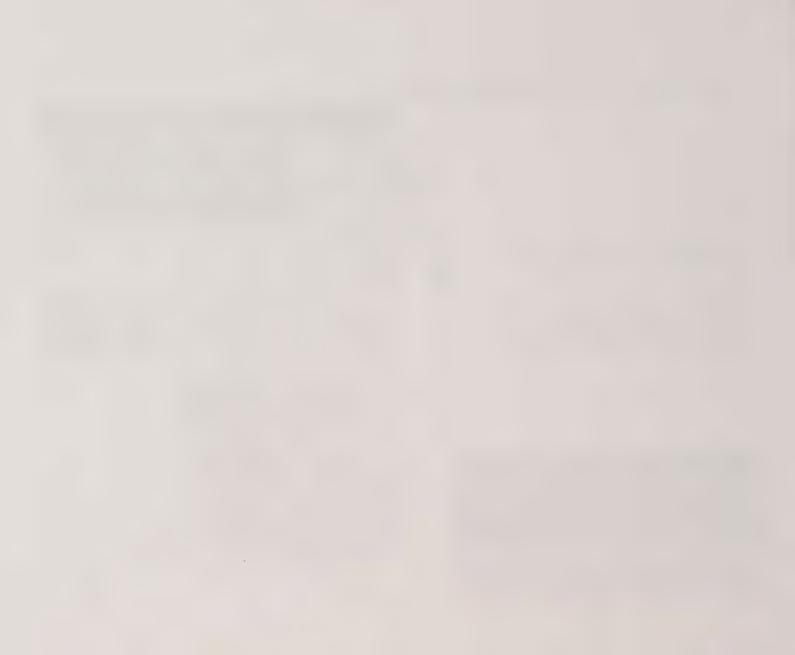
## The Northeast's detailed forecast of "submarkets"

Den	nand	Averag	e Annual	Growth
Key "submarkets" uss	999 Billion	Demand 1989-99	~	Imports 2000-04
Computer Process./Software	73.4	12.1	8.0	11.0
Motor Vehicles	69.9	3.3	3.0	4.4
Trucking/Courier Svc's	44.2	4.8	2.2	2.9
Pharmaceuticals	31.9	9.6	7.0	10.3

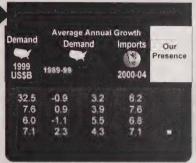
Fastest growing "submarkets" 2000-2004		Demand 1999, S\$ Billion	Growth in Imports 2000-04
Semiconductors	8.1%	17.8	11.3
Computer Processing & Software	8.0%	73.4	11.0
Pharmaceuticals	7.0%	35.3	10.3
Management & Consulting	6.9%	33.4	7.0
Radio & TV Broadcasting & Commercial Equip	6.7%	9.4	12.2
1			

Note: Submarkets of at least US\$ 5 Billion Source: Industry Canada compilations based on data from DRI

P-10



## ...but other market opportunities are also available



Petro Refining & Related Prods Crude Petroleum & Natural Gas Aluminum Concrete & Gypsum



Apparel from Pur. Material Toys/Sporting Goods Household Furniture Plastic Materials/Resins **Toilet Preparations** 

Demand	Averag Dem		l Growth Imports	Our
1999 US\$B	1989-60	*	2000-04	Presence
28.0	3.6	2.9	4.8	•
8.1	6.0	4.7	5.4	•
8.0	3.4	3.6	7.9	•
7.9	0.5	3.6	5.4	
6.3	2.8	3.4	5.8	

11.5	5.0	3.0	6.2	
9.8	3.8	2.4	5.2	
6.0	1.2	2.4	8.0	

Non-Alcoholic Beverages Agri/Forestry/Fish. Services Soap/Cleaning Preparations

> Printing & Publishing \*\* Communication Equipment

**New & Emerging** 

57.4 5.6 19.5 5.7 9.1

DRI provides market information on 55 Groups and 246 Sectors. The Please see Slide M-3 for descriptions of above "submarket" information comes from Sector data. We focus on Traditional, Value-added Traditional, Niche non-banking Sectors in which there is likely considerable trade.

and New & Emerging

#### Our Presence\*

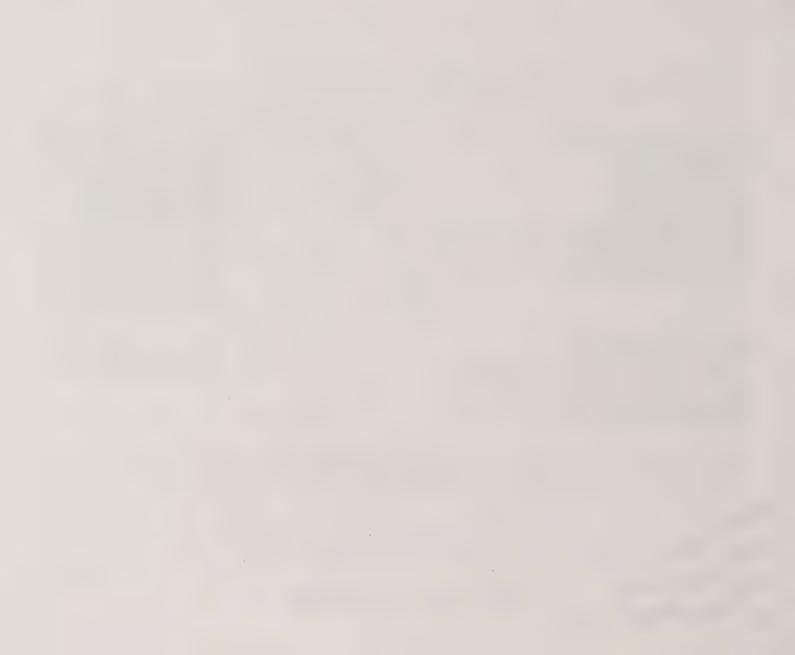
• High Only national info available, see slide M-17



The benchmark value is the share of total Canadian exports in total U.S. market demand (1.5%).

\*\* Reflect new developments in financial and media industries Source: Industry Canada compilations based on data from DRI





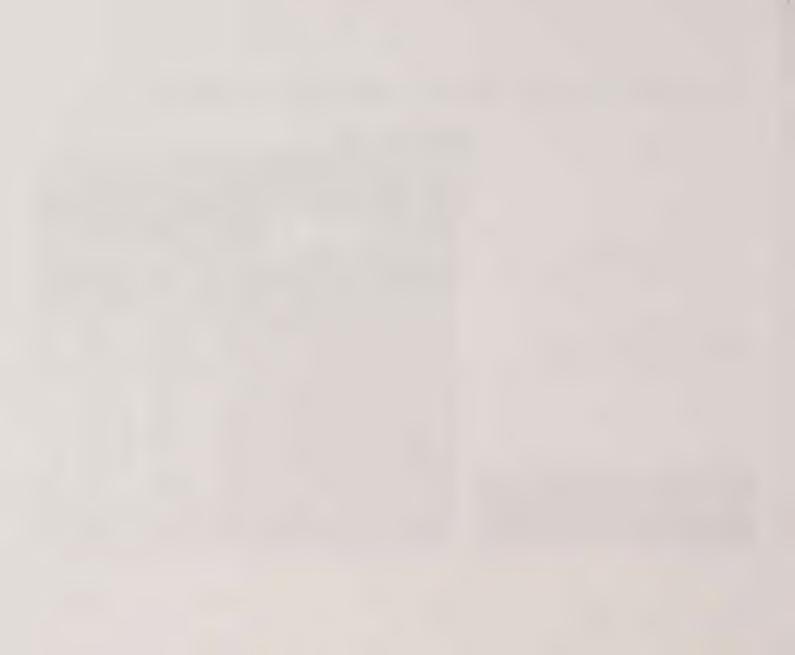
# In the South, strong growth has created export opportunities...

The South is expected to experience strong market growth.

Our major exports to the South include Autos & Other Transportation Equipment, Electrical & Electronics, and Wood.

Opportunities will be abundant in the South, where a booming economy has fuelled demand for imports.

14.2% 14.0% 10.5% 9.9% Midwest West	Exports 1998, \$ Billion	Average Ann Exports 1989-98	ual Growth, U.S. Outp 1989-97
Northeast South		Contractor of the same	dalder brotestatische Steile George Manter er (1986)
Aulos & Other Transportation Equip Electrica & Electronic s Wood Machinory Chemicals	7.9 4.8 3.6 3.3 2.9	15.1 11.0 15.1 13.6 13.2	5.8 7.6 6.4 5.6 4.1
Next 10  Paper Primary Metals Plastics & Rubber Oil & Gas Fabricated Metals Furniture & Fixtures Food Petroleum & Coal Primary Textiles Non-Metallic Minerals	2.9 2.4 2.3 1.8 1.6 1.2 1.1 0.9 0.9	6.3 5.6 13.9 22.0 16.2 25.7 23.0 23.9 21.1 18.2	2.3 4.0 5.4 4.4 6.0 4.1 5.4 1.6 2.5 3.3

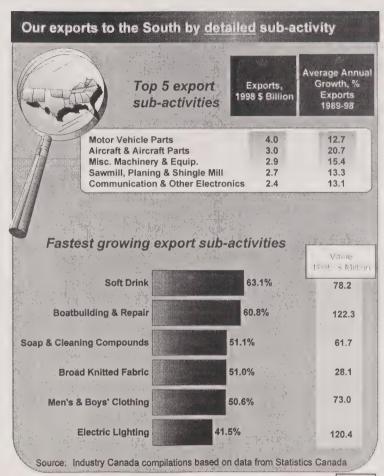


## ...in areas such as in aerospace...

Among high-volume exports, notable sectors include Aircraft & Aircraft Parts, Miscellaneous Machinery & Equipment, Communication & Other Electronics, and building products exports involving wood.

A booming economy has also supported consumer demand for emerging export sectors such as clothing, fabric, and soft drinks.

The South has been a large importer of some of Canada's high-technology exports — eg. aerospace and miscellaneous machinery.





## ...and in electronic and computer equipment...

High-technology equipment growth has been strongest here. This includes the growth in demand for Electronic Components and Computers, and for Business Services.

Growth in these markets is expected to remain among the fastest in the country.

The South's most knowledge-based markets will likely continue to be drivers of growth in the years ahead.

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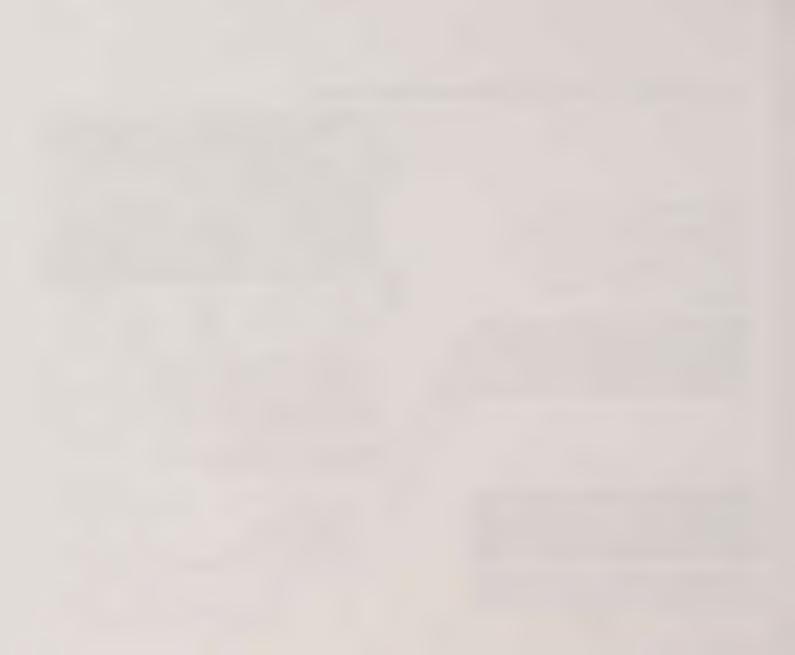


## Regional markets and forecast growth



<sup>\*</sup> Ranked by forecast growth rate from 2000-04.

Source: Industry Canada compilations based on data from DRI



...as the Southern economy reflects the rising importance of high-tech activities...

The South's detailed of "submarkets"

Kev

Average Annual Growth

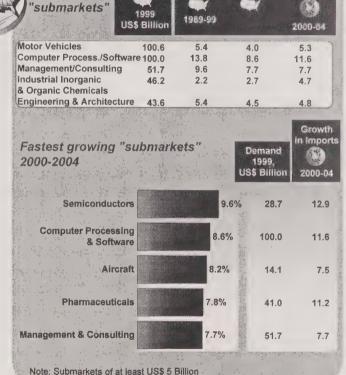
Imports

Rapid rises in the demand for semiconductors, aerospace and pharmaceuticals are among the interesting developments forecast for the South.

But with strong local suppliers. imports will meet strong competition.

Our already low presence in key growing markets may be challenged further in the days ahead. Opportunities exist — but competition will be keen.

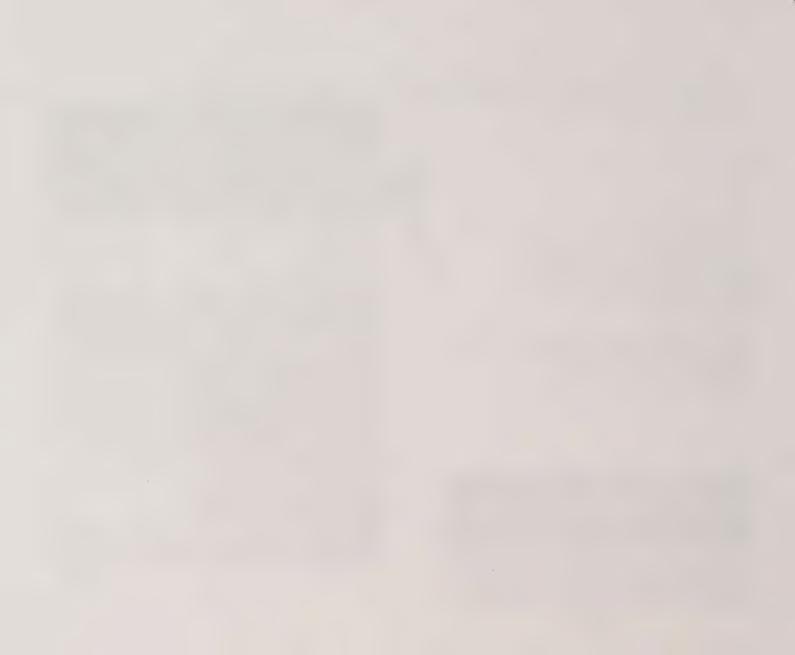
DRI provides market information on 55 Groups and 246 Sectors. The above "submarket" information comes from Sector data. We focus on non-banking Sectors in which there is likely considerable trade.



Demand

Demand

Source: Industry Canada compilations based on data from DRI



# ...but in the South, too, opportunities are widespread





Motor Vehicles
Crude Petroleum & Natural Gas
Petro Refining & Related Prods
Concrete & Gypsum
Aluminum
Tires & Inner Tubes

Apparel from Purch. Material Plastic Materials & Resins Household Furniture Toys & Sporting Goods Toilet Preparations Structural Metal/Plate Work Office Furniture

Demand 1999 US\$B	Average Dema T955-59	•	Prowth Imports 2000-04	Our Presence
36.6	4.7	3.8	5.8	
11.7	2.7	4.9	6.7	•
10.6	5.0	4.6	8.9	•
10.5	7.6	5.8	7.0	
7.9	4.4	4.5	6.9	
8.9	4.6	4.4	5.7	
7.1	7.5	6.7	10.8	

16.3	6.3	4.0	73	
17.1	5.5	2.9	57	
13.4	4.4	3.5	5.3	
8.2	2.6	3.4	91	
6.2	4.7	2.3	4.9	
53	2.3	3.6	18.6	

Non-Alcoholic Beverages Agri/Forest/Fish. Svc's Paperboard Containers/Boxes Soap & Cleaning Preparations Glass & Products Sanitary Paper Products

Printing & Publishing \*\*
Communication Equipment
Measuring/Control Instruments

60.7 4.3 3.3 6.7 31.2 10.4 6.4 9.9 • 8.3 6.1 1.9 6.2 •

New & Emerging

DRI provides market information on 55 Groups and 246 Sectors. The above market information comes from <u>Sector</u> data. We focus on non-banking Sectors in which there is likely considerable trade.

Please see Slide M-3 for descriptions of Traditional, Value-added Traditional, Niche and New & Emerging

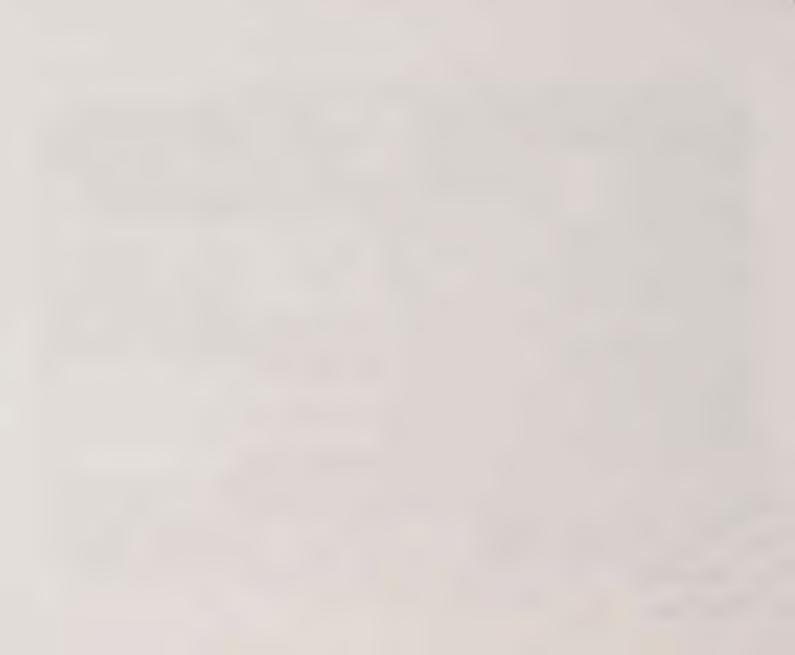
#### Our Presence\*

● High ● Above Avg ② Average ○ Low

Only national info available, see slide M-17

- \* The benchmark value is the share of total Canadian exports in total U.S. market demand (1.5%).
- \*\* Reflect new developments in financial and media industries Source: Industry Canada compilations based on data from DRI

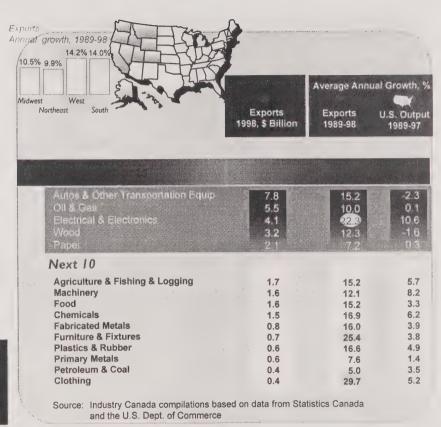
P-16

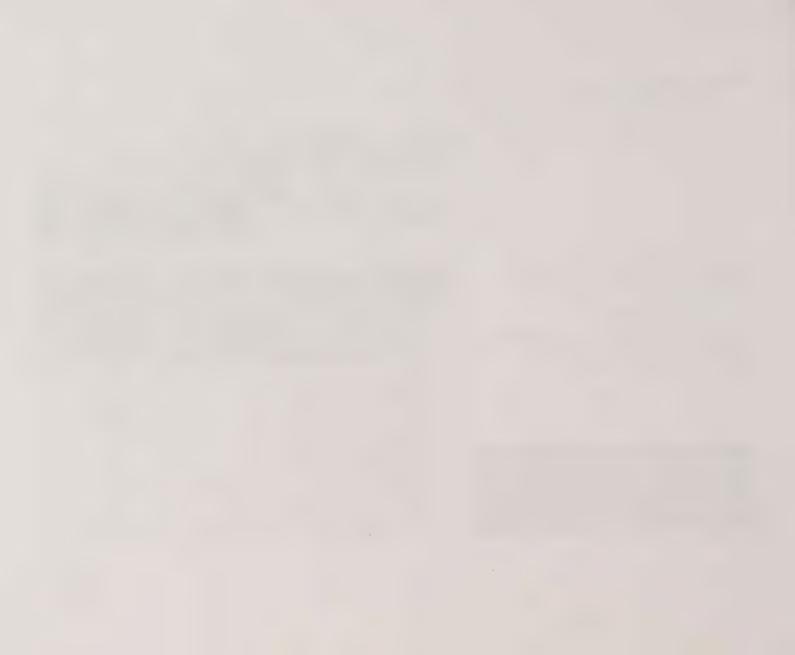


## In the West...

The fast-growing Electrical & Electronic sector has emerged as a major source of Canadian exports to the West, supplementing traditional exports, such as Autos, Oil & Gas, and Wood & Paper Products.

The West has witnessed the fastest explosion in Canadian export growth in recent years, having received a traditionally smaller share of our exports.





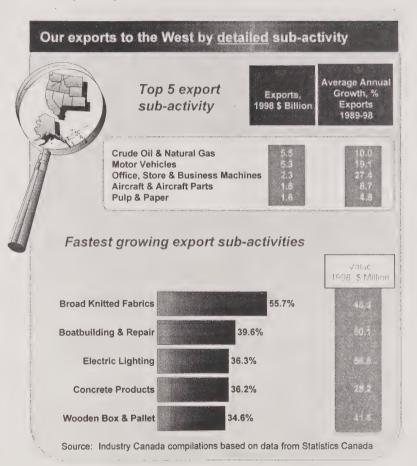
## ...Oil and Autos remain among our top exports...

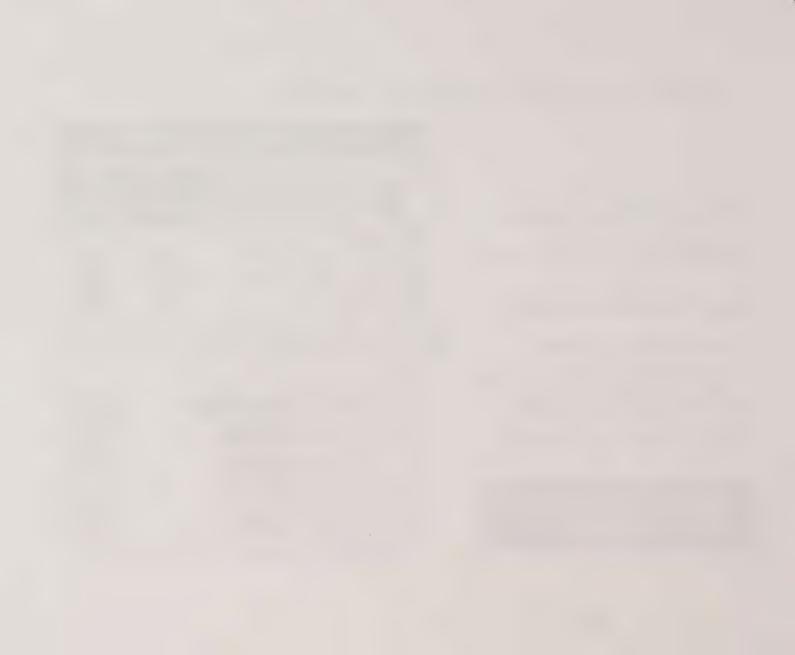
Exports to the West reflect the structure of the Western Canadian economy, with oil & gas exports occupying a relatively important share.

But computers are among our top 5 exports, as are aerospace exports.

Canada is showing strong and noticeable growth in many niche areas — clothing, electric lighting etc. — with exporters benefitting from improved U.S. access since 1989, and strong consumer demand in recent years.

Oil and motor vehicles are big export Items.





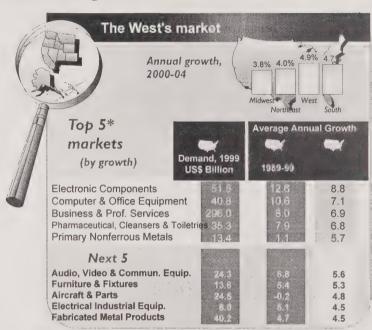
# ...but the West's bright future centers on high-tech markets...

The West's strong market forecast reflects growing demand for Electronic Components, Computers, Business Services and Pharmaceuticals.

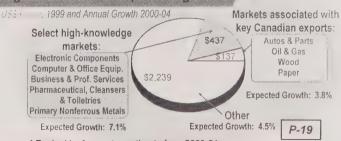
Our current exports are concentrated in the low-knowledge sectors which comprise only a small share of the region's burgeoning market.

The West's future is being built on a modern infrastructure that, in addition to the type of exports we presently deliver, requires even greater amounts of higher knowledge goods and services.

DRI provides market information on 55 Groups and 246 Sectors. The above market information comes from Group data. We focus on non-banking Groups in which there is likely considerable trade.

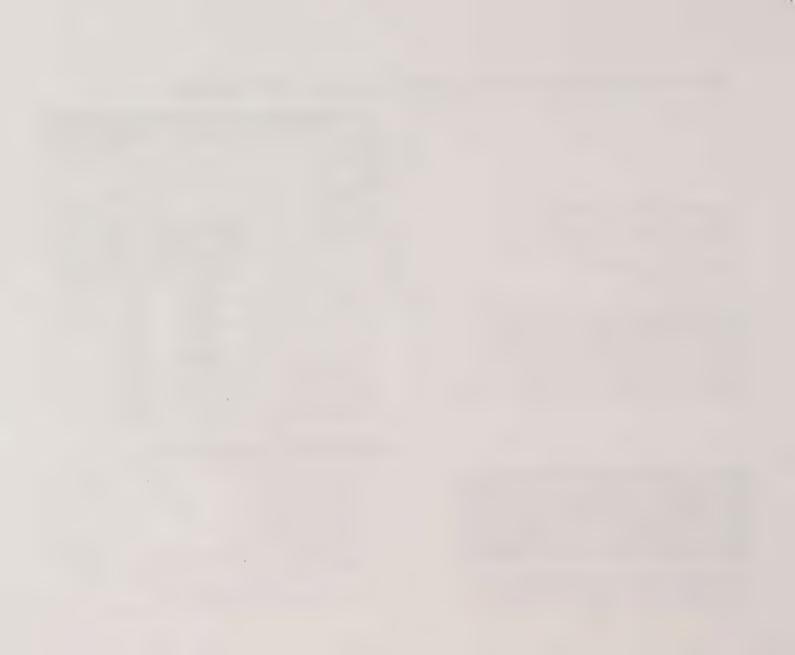


## Regional markets and forecast growth



\* Ranked by forecast growth rate from 2000-04.

Source: Industry Canada compilations based on data from DRI



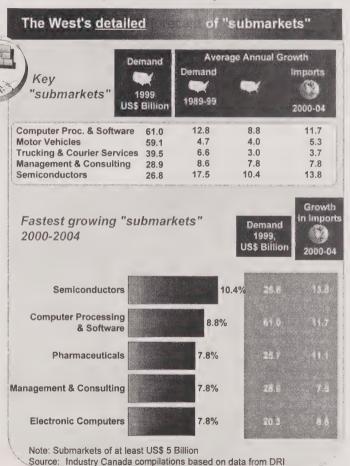
## ...and leading-edge equipment for a modern supereconomy...

Markets for computer software, semi-conductors and management services are expected to increase in importance.

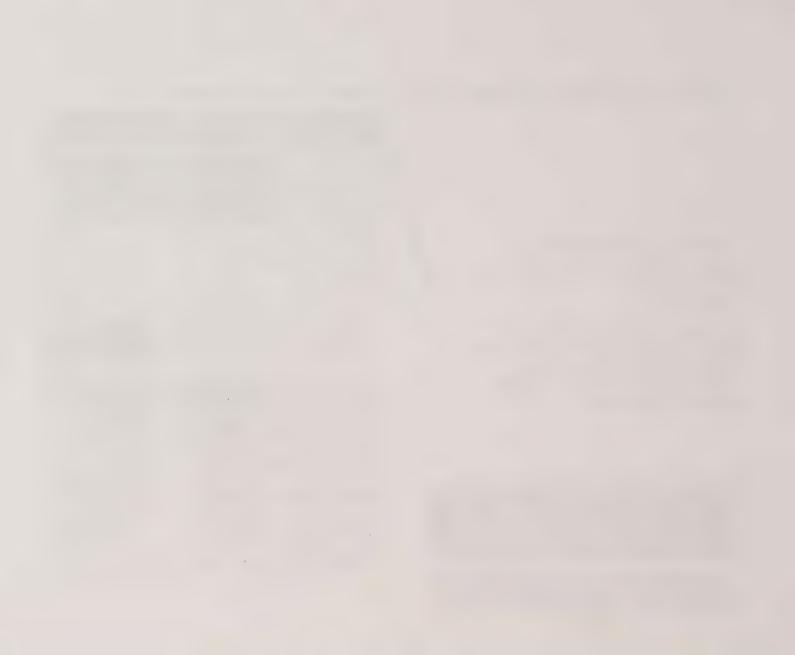
As demand for these goods and services increases, firms will have to look beyond the U.S. suppliers, creating opportunities for Canadian and foreign industries.

Computer software and semiconductor demand is expected to pick-up considerably in the next few years.

DRI provides market information on 55 Groups and 246 Sectors. The above "submarket" information comes from Sector data. We focus on non-banking Sectors in which there is likely considerable trade.



P-20



# ...that will lead to interesting opportunities throughout the West



Motor Vehicles Crude Petroleum & Natural Gas Petro Refining & Related Prods Concrete & Gypsum Aluminum

Apparel from Purch. Material Toys & Sporting Goods Household Furniture

**Toilet Preparations** 

Demand 1999 USSB	Average A Deman 989-99		Growth Imports 2000-04	Our Presence
23.2	5.0	3.8	5.8	
6.7	7.3	5.7	6.4	
6.7	4.6	4.6	8.9	•
5.0	3.9	4.4	6.8	49.46

10.0	6.3	39 71 .
11.0	5.0	2.9 50 .
7.4	44	35 52 .

Non-Alcoholic Beverages Agri/Forest/Fish. Services Paperboard Containers/Boxes

Printing & Publishing \*\* Computers & Peripheral Equip Communication Equipment

40.8 40.8 10.6 7.7 18.6 84 9.8

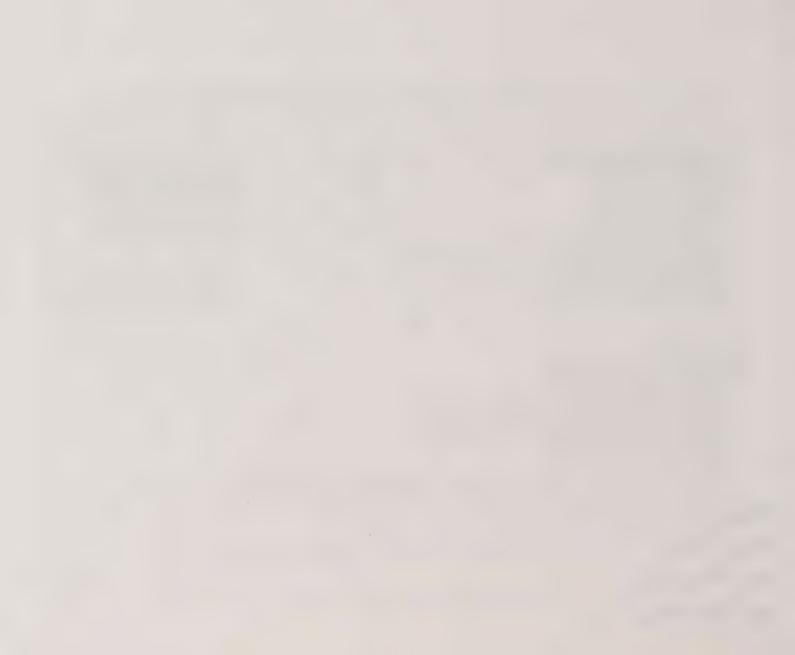
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and New & Emerging

#### Our Presence\*

- High Only national info available, see slides M-17
- \* The benchmark value is the share of total Canadian exports in total U.S. market demand (1.5%).
- \*\* Reflect new developments in financial and media industries Source: Industry Canada compilations based on data from DRI



## For Further Information

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The *Micro-Economic Monitor* is prepared on a quarterly basis by the Micro-Economic Analysis Directorate of Industry Canada. The Monitor provides a quick and easy-to-read update on Canada's economic performance. It also provides topical in-depth reports on current economic issues from a micro-economic perspective.

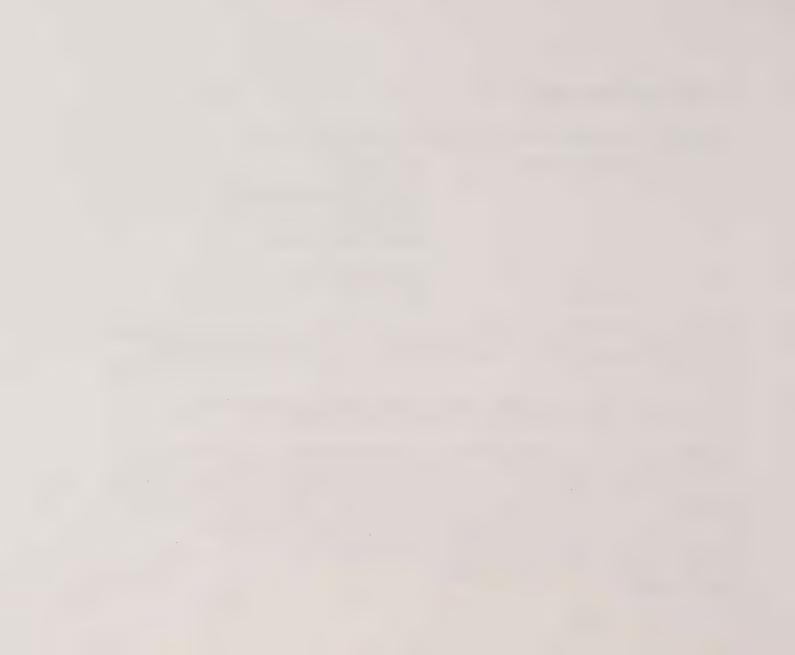
The current analysis update was prepared by Marianne Blais, Julie Dubois, Joseph Macaluso, Alison McDermott, and Karen Smith, under the direction of Shane Williamson.

This quarter's feature was prepared by Gary Sawchuk from Strategic Initiatives with Nigel Marshman and Cemile Sancak from the Strategic Investment Analysis Directorate — with a lot of help from a lot of friends. Special thanks to Aaron Sydor and Ash Ahmad from Strategic Investment; Alison McDermott, Wulong Gu and Lori Whewell from the Micro-Economic Analysis Directorate; Dave Dupuis, now at Consumer Affairs and André Patry, now at International Cooperation; and Ram Acharya. Al Streuber from the Prairies and NWT Office and Mostafa Askari from the Department of Finance provided helpful comments.

Presentation / data assistance was provided by Caroline Farmer and Karen Smith.

Translation by Lucie Larocque. Gary Sawchuk is the General Editor of Special Features in the Micro-Economic Monitor.

ISSN 1206-260X



# Micro-Economic 10 nit 0 r

With the special report:

Challenges of Rapid Technological Change

Catching up with JETSONS

Fourth Quarter, 1999

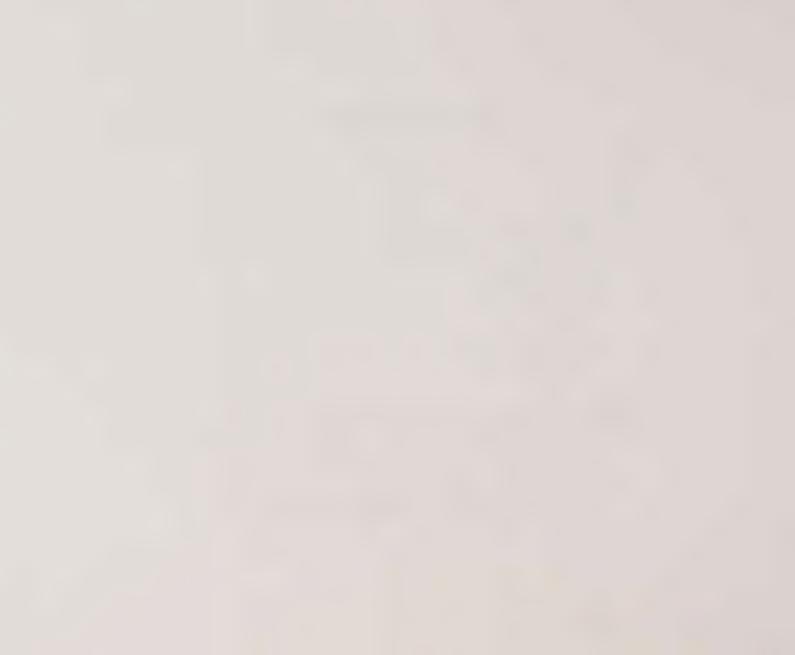
Micro-Economic Analysis Directorate, Industry & Science Policy Sector, Industry Canada.

This document is also available on the Internet at http://strategis.ic.gc.ca/sc\_ecnmy/mera/engdoc/04.html



# **Table of Contents**

Overview A
Domestic Scene
Real Economic Activity B
Income Side C
Price Movements D
Labour Situation E
Financial Variables F
Fiscal Track G
Competitiveness
International Accounts
Sectoral Overview
Special Feature:
Challenges of Rapid Technological Change
Catching up with the Jetsons
Challenges of Rapid Technological Change K
Dimensions of Technological Change L
Challenges & Prospects M
How are we Responding & Preparing for the Future? N
Some Key Messages



Overview



## The economy closes out 1999 on a strong note...

Real GDP expanded 4.6% (annual rate) in the fourth quarter of 1999, boosted by strength in both domestic and external demand.

- Business investment was up sharply, with increased inventory investment and higher spending on plant and equipment. Within the household sector, consumer spending remained strong while the housing market posted a solid advance. Exports continued to advance at a fast rate, although they were outpaced by import growth in the fourth quarter.

The better-than-expected fourth-quarter results brought annual growth for 1999 to 4.2%, the best result since 1994.

### ...as the unemployment rate falls to a near 25-year low-

Employment increased by 427,000 in 1999, dropping the national unemployment rate to 6.8% by December (the lowest since 1976). Job gains led to growth of 3.5% in personal disposable income, and at least temporarily halted the steady deterioration in household finances evident over the course of the 1990s. Corporate profits also rebounded strongly in 1999.

The improved outlook for household and business finances bodes well for the economy in 2000. The latest consensus forecast projects growth of 3.9% overall in 2000.

Technological advances are altering our economy at an unprecedented pace, and business must react quickly to seize opportunities from this change. In particular, Canada's prosperity depends on rapid innovation, and on winning races to foster new and better products and services. This issue's special report, Challenges of Rapid Technological Change – Catching up with the Jetsons documents this rapid technological change and outlines its many challenges.



Real Economic Activity



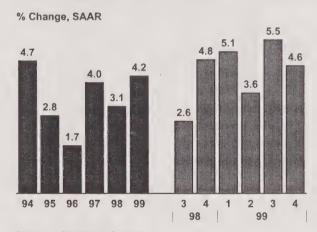
## The economy steams ahead in the fourth quarter...

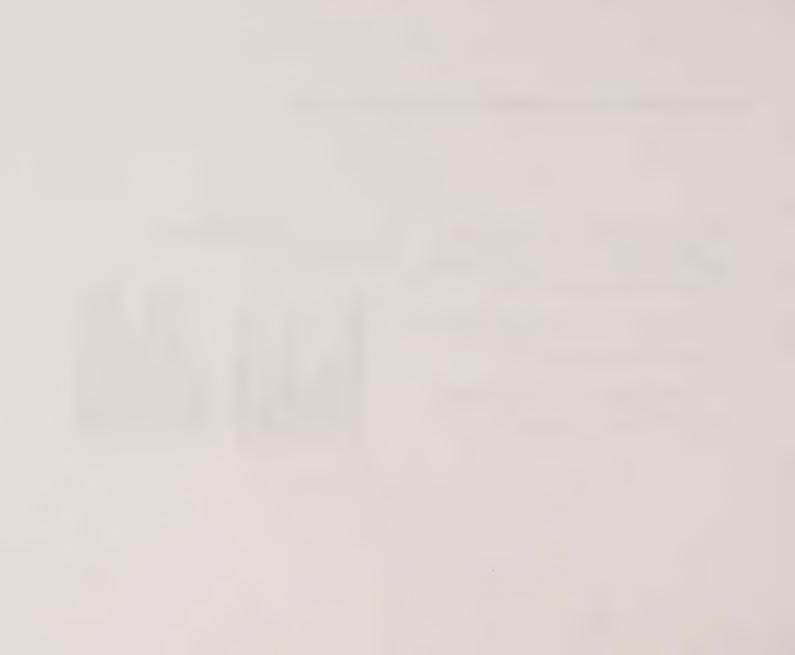
Real GDP rose a solid 4.6% (annual rate) in the fourth quarter of 1999, marking the 18th straight increase. This is the longest string of quarterly gains since the 1960's.

- A pick-up in business investment led the advance, but consumer spending and exports were also higher.

The stronger-than-expected fourth quarter results boosted growth for 1999 as a whole to 4.2%, up from 3.1% in 1998.

#### Real GDP Growth



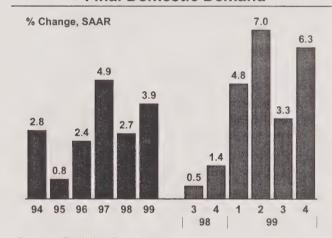


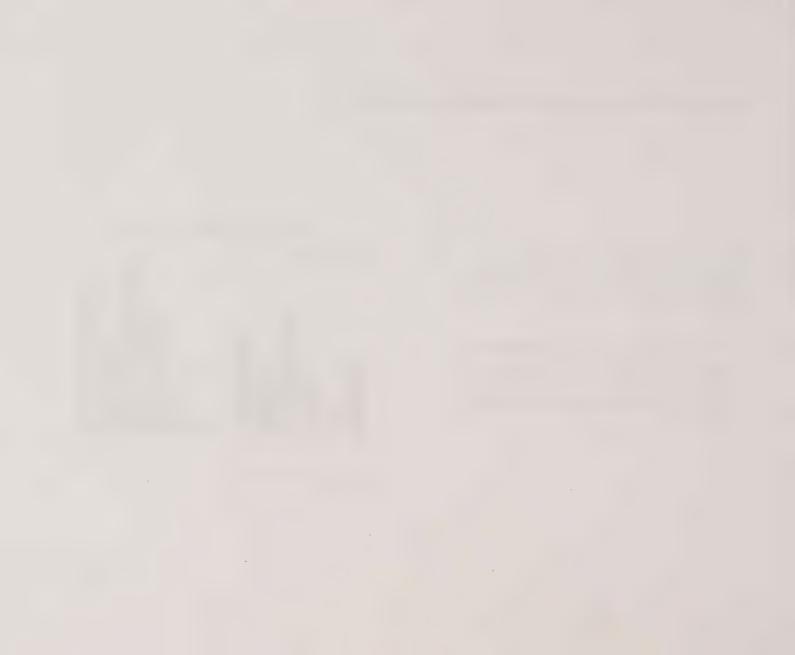
## ...boosted by surging domestic demand...

Final domestic demand increased 6.3% (annual rate) in the fourth quarter of 1999, building on substantial gains earlier in the year.

 The increase was broadly based, with higher investment in M&E, inventories and construction. Increased consumer spending also contributed to domestic demand.

#### **Final Domestic Demand**





### ...and a solid advance in exports

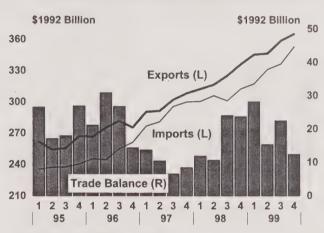
Exports of goods and services rose 7.4% (annual rate) in the fourth quarter, slowing somewhat from the pace of the previous quarter.

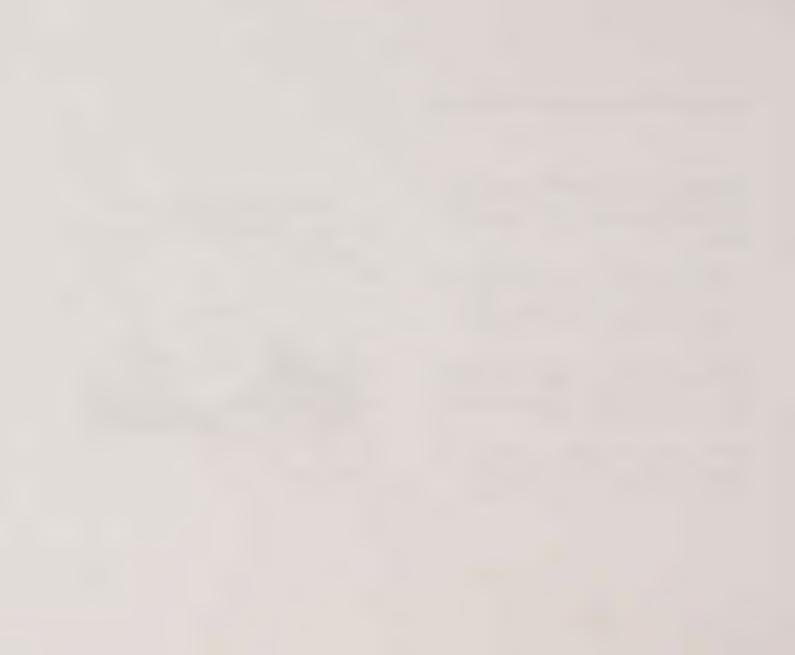
 Exports of M&E, Forestry Products, Automotive Products, and Industrial Goods & Materials were higher, while exports of Energy Products declined.

Faster import growth (21.2% annualized) cut into output growth, with a sharp increase for investment-related M&E (particularly aircraft and communication products).

With import growth greatly outpacing export growth, Canada's real trade surplus fell markedly in the final quarter of the year.

# Real Exports and Imports of Goods & Services





## Investment in M&E rebounds sharply...

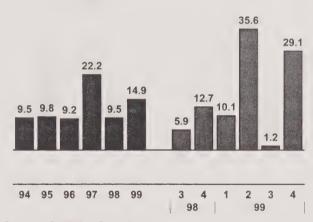
Following a pause in the third quarter, business investment in M&E regained its strong upward momentum in the fourth quarter, rising 29.1% (annual rate).

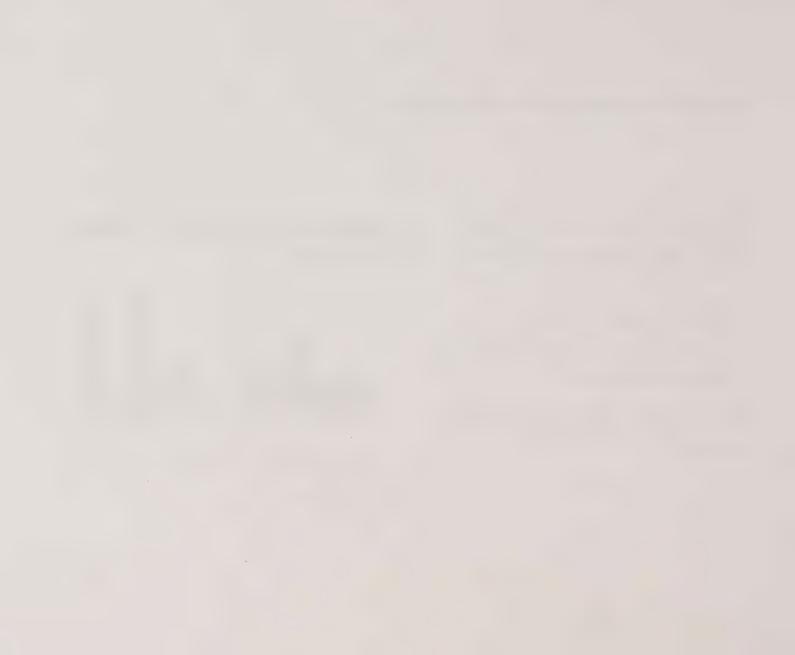
- The fourth-quarter advance was widespread, with purchases of computers, transportation equipment and telecommunications equipment recording the largest increases.

For the year as a whole, M&E investment was up nearly 15% in 1999 compared to its 1998 level.

### **Real Machinery & Equipment Investment**

% Change, SAAR





### ...and firms add to their stock of inventories...

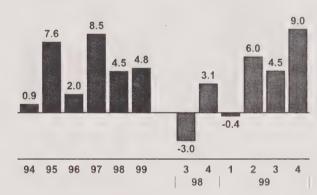
Business investment in non-farm inventories totalled \$9.0 billion in the fourth quarter of 1999, double that in the previous quarter.

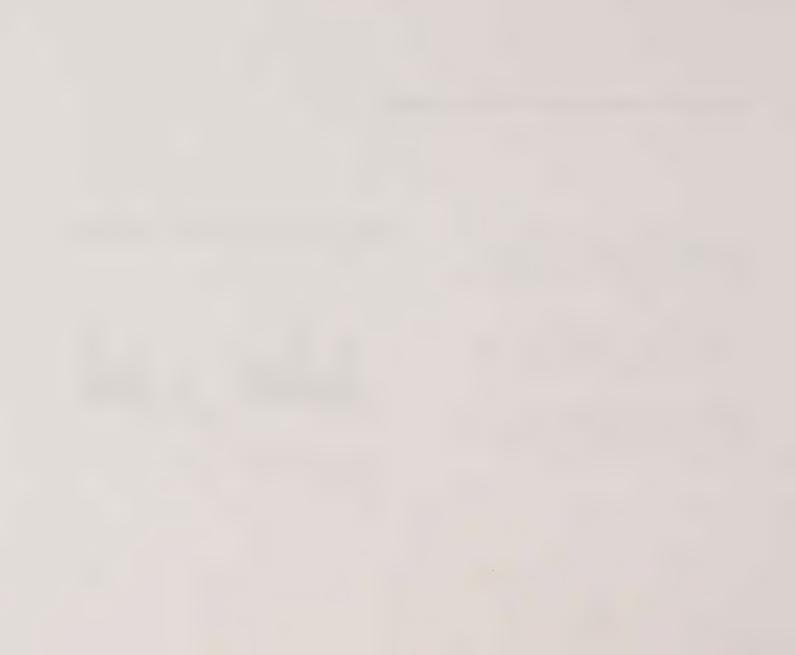
 Inventory accumulations in Manufacturing and Wholesale Trade were concentrated in durable goods.

Despite a steady build-up of inventories over the past three quarters, the stock-to-sales ratio has fallen due to an even faster increase in sales.

### **Non-farm Business Inventory Investment**

\$1992 Billion, SAAR





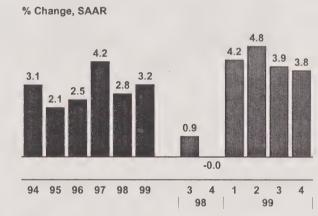
## ...as consumer spending remains strong...

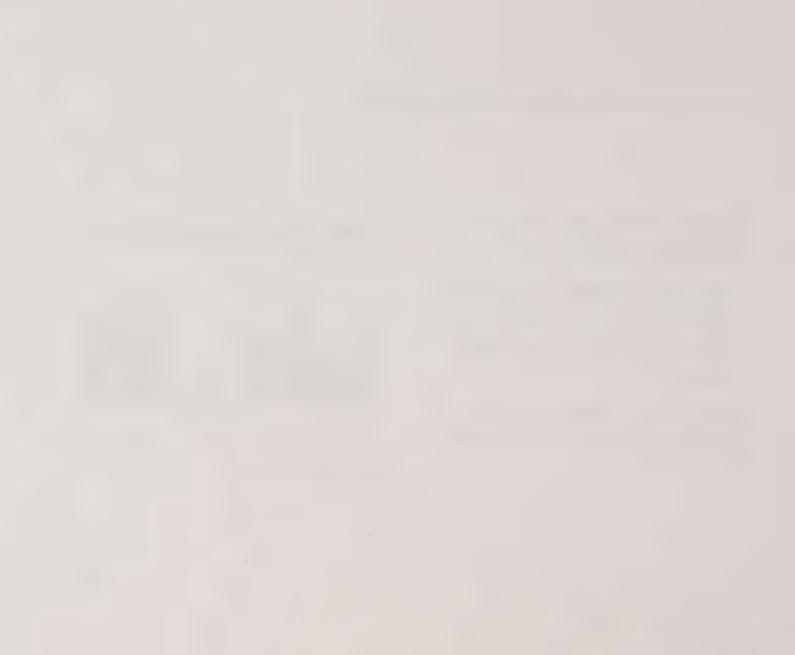
Consumer spending rose 3.8% (annual rate) in the fourth quarter, the fourth straight period of solid growth.

 Y2K-related celebrations and stockpiling provided a boost to fourth quarter spending, and auto sales also remained strong. Mild weather reduced demand for electricity, heating fuels, and winter clothing.

Rising consumer confidence and solid income growth bode well for further gains in consumer spending.

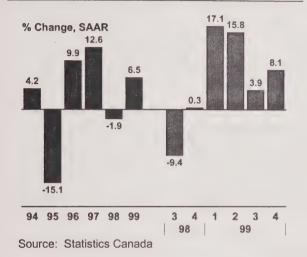
### **Real Consumer Expenditure Growth**



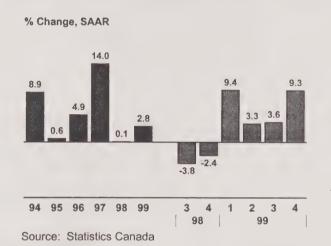


## ...and the construction sector strengthens

### **Real Residential Construction Growth**

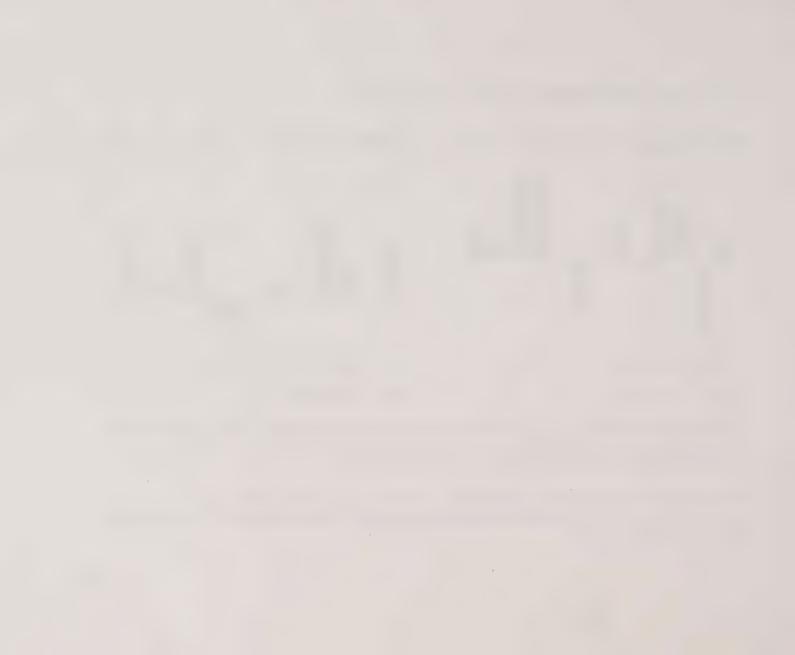


#### **Real Non-residential Construction Growth**



Investment in Housing rose 8.1% (annual rate) in the fourth quarter of 1999, with advances in new housing construction and renovation activity. For the year as a whole, housing investment was up 6.5%, rebounding from a loss in 1998.

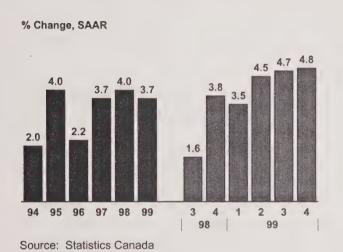
Investment in non-residential construction advanced a solid 9.3% (annual rate) in the fourth quarter. Strong growth in engineering construction more than offset a slight decline in building construction.



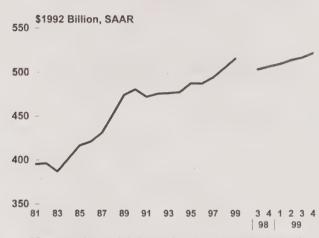
Income Side

## Growth in personal income strengthens...

### **Growth in Personal Income**



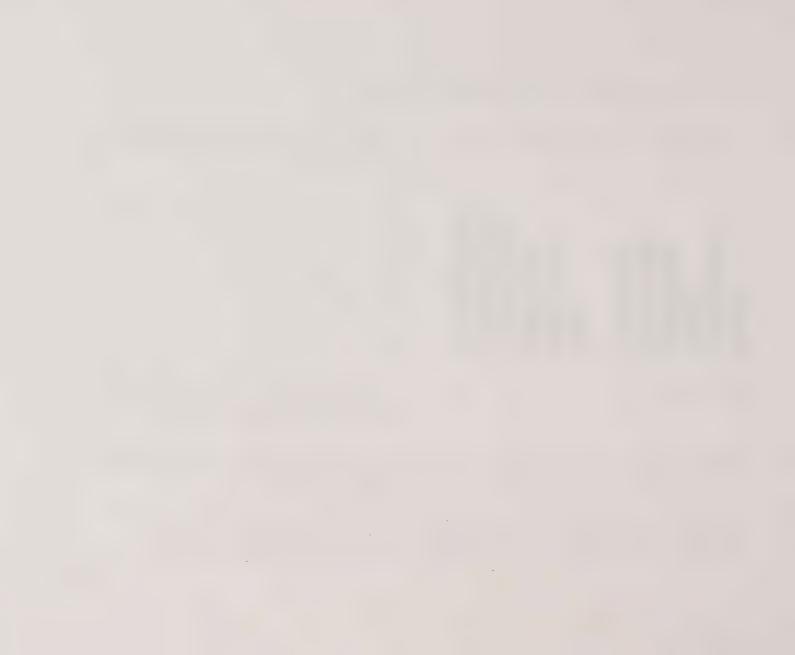
### Real Personal Disposable Income\*



\*Converted to real dollars using the chain price index for personal expenditure on goods and services. Source: Statistics Canada and Industry Canada

Growth in personal income increased steadily throughout 1999, reaching 4.8% (annual rate) in the fourth quarter, the biggest gain since the first quarter of 1998.

For the year as a whole, personal income was up 3.7% in 1999. However, as income taxes and employee contributions to social insurance programs rose at a slightly faster pace, personal disposable income increased by only 3.5% - 2.2% after adjusting for inflation.



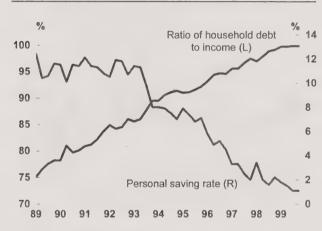
## ...but household finances hold steady

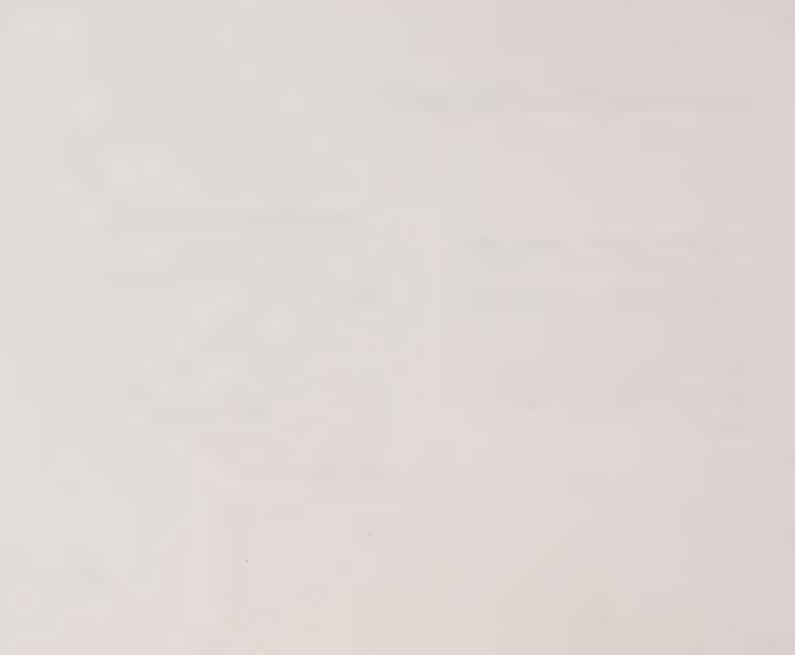
The personal saving rate was unchanged at 1.1% in the fourth quarter of 1999.

- This is the lowest saving rate on record (available data extend back to 1961).

In addition, with consumer and mortgage debt levels rising at roughly the same rate as income, the household debt-to-income ratio held steady at 99.9% in the fourth quarter.

### **Personal Debt and Savings Rate**



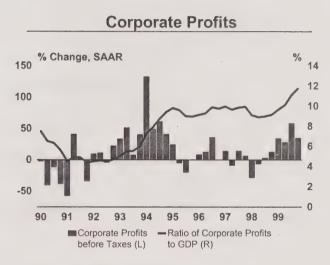


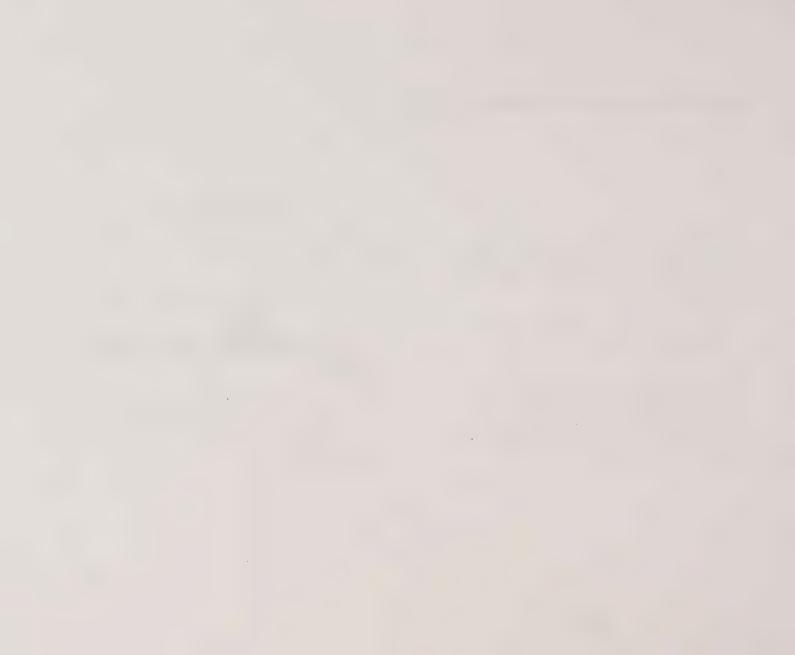
## Corporate profits continue to surge

Corporate profits increased by 35.1% (annual rate) in the fourth quarter of the year, building on an exceptional gain in the previous period.

- Profits increased to 11.8% of GDP, a nineteen-year high.

Overall in 1999, corporate profits rose 25.2%, the biggest gain since 1994. Strong demand in North America and higher commodity prices have provided a boost to firms' finances.





**Price Movements** 



### Inflation rises over the course of 1999...

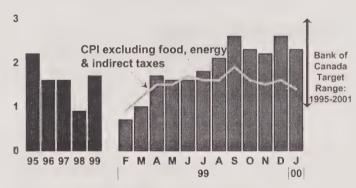
After increasing by only 0.9% in 1998, consumer prices increased by 1.7% in 1999, comparable to increases in 1996 and 1997.

Inflation was 2.3% in January 2000, below that in December but similar to October and November's rate.

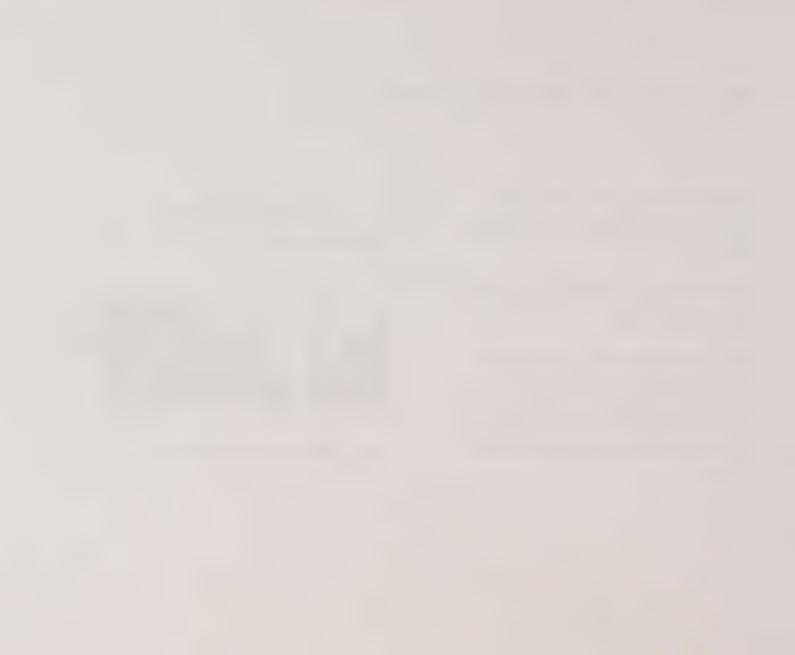
The "core" inflation rate – excluding the volatile food and energy components as well as the impact of indirect taxes – fell to 1.4% in January, well within the bottom half of the 1-3% target range set jointly by the Bank of Canada and Department of Finance.

#### **Consumer Price Index**

Year-Over-Year % Change



Source: Statistics Canada & Bank of Canada



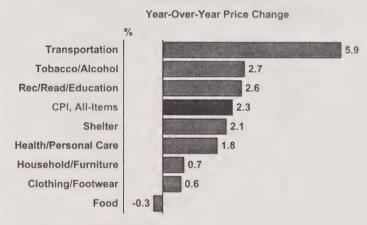
## ...driven up by higher energy prices

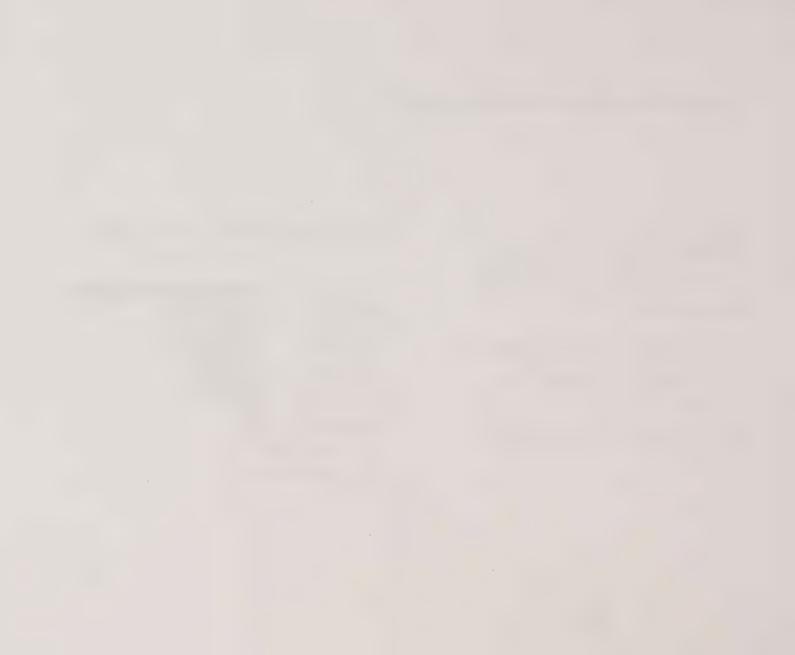
Higher energy costs – notably for gasoline, natural gas and heating oil – accounted for roughly half of the 2.3% year-over-year increase in consumer prices in January.

- Production cutbacks by members of OPEC have raised the price of gasoline by 25.3% compared to January 1999.

Excluding energy, the CPI was up only 1.1% in January.

### Components of CPI: January 2000





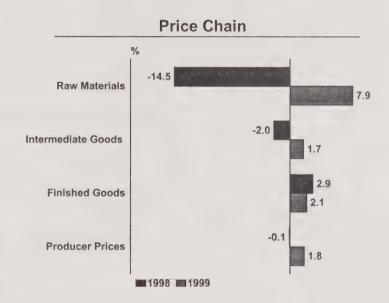
## Commodity prices rise sharply in 1999

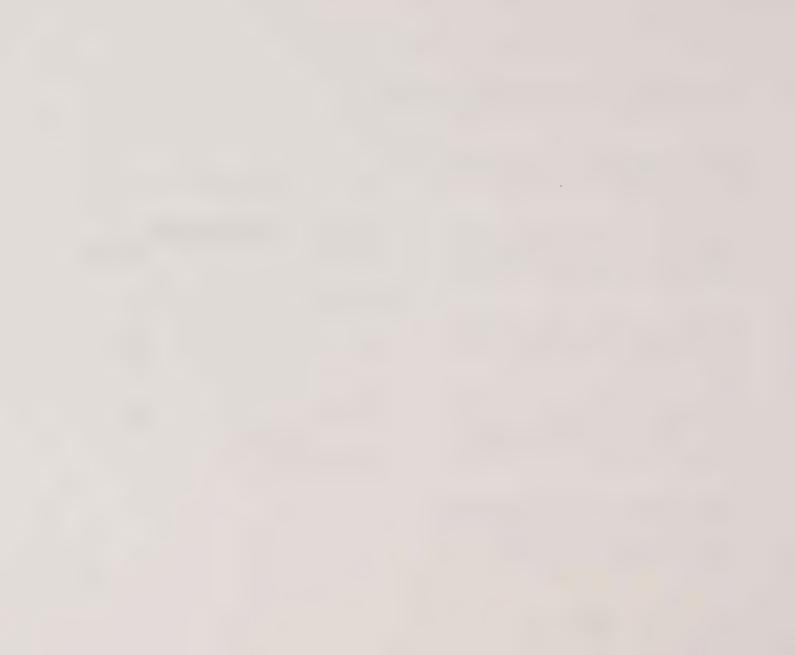
The price of raw materials increased 7.9% in 1999, rebounding from two consecutive annual declines.

- This strength in commodity prices stems mainly from a sharp rise in the price of crude petroleum, which jumped up 36.5% in 1999.
- In contrast, there were major declines in the price of grains, oilseeds and ferrous materials such as iron ore and steel.

Industrial product prices – those received by producers at the factory gate – were up 1.8% in 1999. Though modest, this increase is nonetheless represents the highest increase since 1995.

- Although higher prices were due in large part to higher fuel prices, rising prices for lumber and motor vehicles also contributed, albeit to a lesser extent.





**Labour Situation** 

# Strong job growth in 1999...

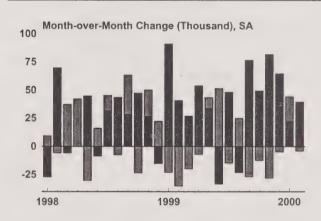
The economy generated 427,000 net new jobs in 1999, the third straight year of solid growth.

 The pace of job growth picked up considerably over the September-December period, with a net gain of roughly 200,000 jobs in that four month period.

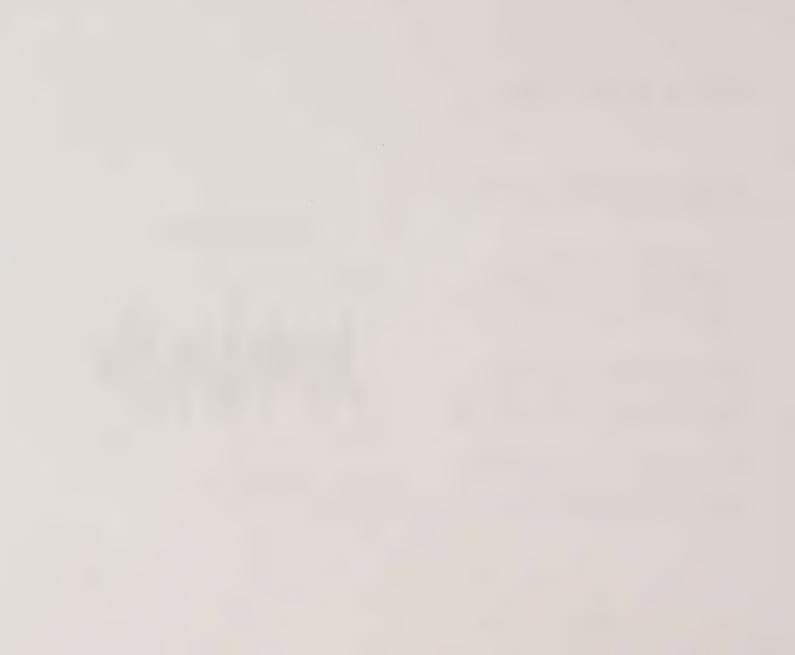
All of the net job gains in 1999 were in full-time work. The number of full-time positions increased by 511,000, compared to a drop of 84,000 in part-time employment.

Job growth in January and February 2000 slowed somewhat from its fast pace at the end of 1999. Still, employment was up 80,000 in the first two months of 2000.

#### **Employment Growth**



Full-Time Part-Time



# ...with gains in both private and public sector employment...

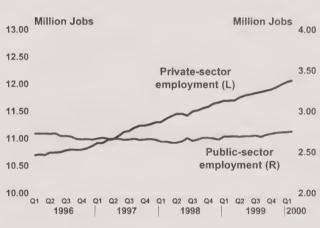
The private sector remained the biggest source of new jobs in the economy. Private-sector employment was up 336,000 in 1999, accounting for 80% of the total increase.

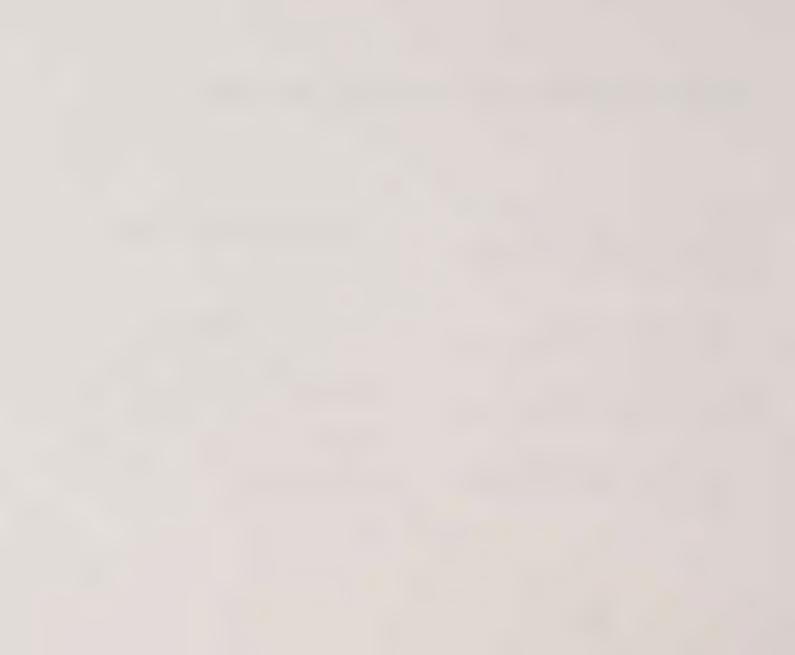
 Within the private sector, self employment increased by 46,000 on the year, its slowest pace in five years.

Employment in the public sector rose 91,000 in 1999, the first substantial annual increase since 1991.

 Even with this advance, public-sector employment is 130,000 below its peak in early 1993.

#### **Employment: Private vs. Public**





# ...drops the unemployment rate to a 25-year low

Strong employment growth lowered the national unemployment rate to 6.8% in December 1999, its lowest level since April 1976.

 The unemployment rate held firm at 6.8% in January and February 2000, with employment gains matched by a higher labour force.

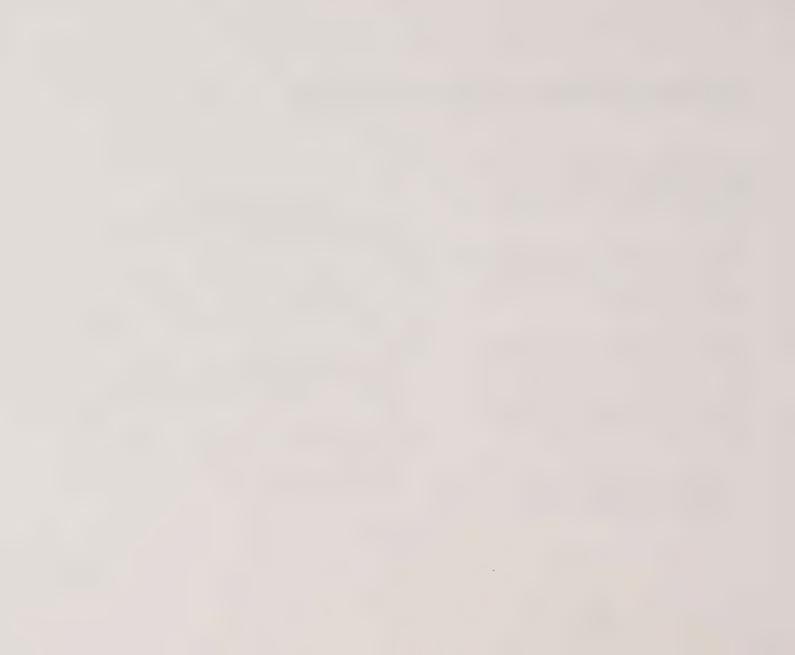
The youth unemployment rate fell 1.8 percentage points over the course of 1999, reaching a nine-year low of 13.1% in December. The adult employment rate dropped from 6.8% at the outset of the year to 5.6% by December 1999.

- There has been little change in unemployment rates for both groups in the first two months of 2000.

# 20.0 % 17.5 15.0 12.5 10.0 Adult Total

1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

**Unemployment Rates** 



# Employment is up in every province...

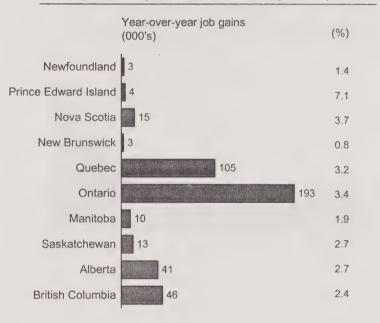
As of February 2000, all provinces recorded a net employment gain on a year-over-year basis.

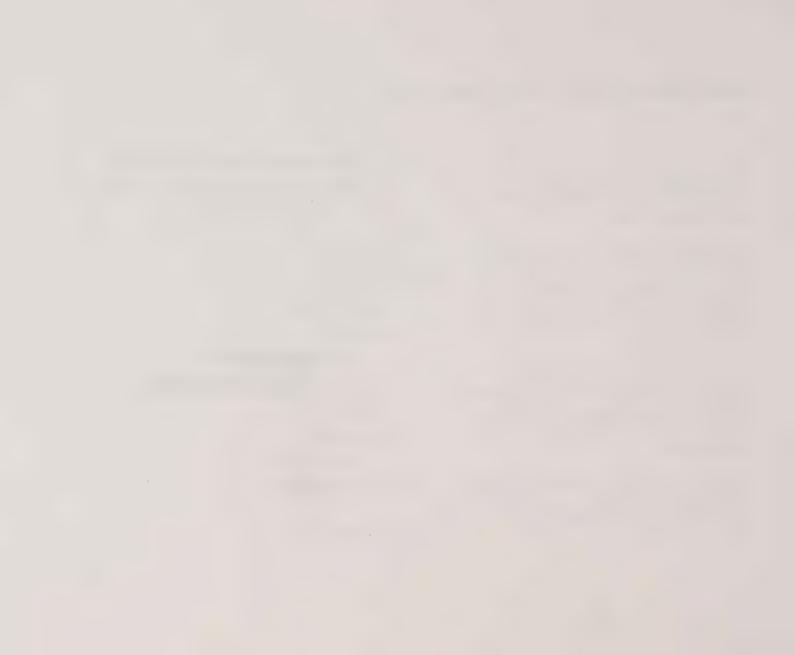
Nearly half of Canada's total job gains over this period have been in Ontario, where Manufacturing has been an important engine of growth. This sector has also been an important source of new jobs in Quebec.

In percentage terms, Newfoundland posted the fastest growth overall in 1999 (6.8%). However, employment fell back sharply in this province in January and February 2000.

Prince Edward Island and Nova Scotia have both enjoyed above average job growth on a year-over-year basis.

# Employment Growth by Province (February 1999 to February 2000)





#### ...leading to lower unemployment rates everywhere but Newfoundland

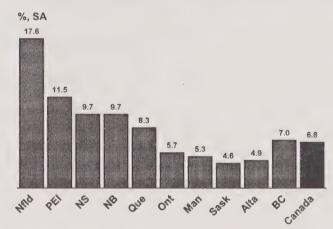
Unemployment rates are down in every province on a year-over-year basis except in Newfoundland.

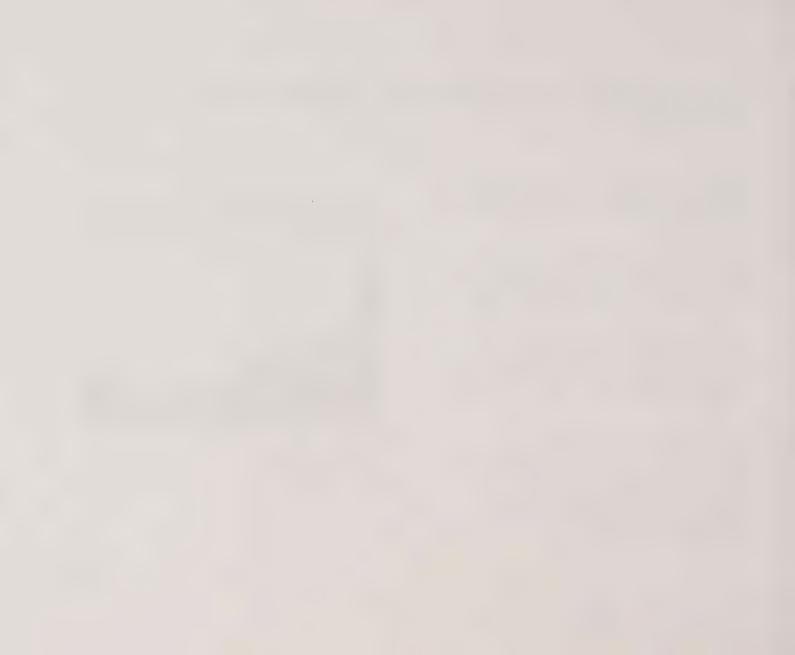
Newfoundland's unemployment rate fell sharply over the course of 1999, dropping from 18.7% to 14.1% by December 1999.

 However, job losses in January and February took back most of this improvement, with the unemployment rate rising back up to 17.6% in February 2000.

As of February 2000, the largest year-over-year falls in unemployment rates have been registered by Prince Edward Island (-3.8 percentage points), Saskatchewan (-2.1 points) and New Brunswick (-1.9 points).

#### **Unemployment Rates: February 2000**





Financial Variables



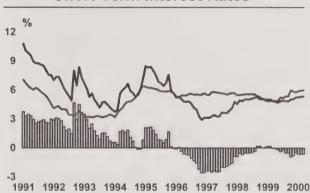
#### The Bank of Canada raises interest rates...

The Bank of Canada, which had last hiked interest rates in November, raised its trend-setting Bank Rate by 25 basis points on February 3. This move triggered a corresponding increase in the major banks' Prime Lending Rate to 6.75%.

U.S. and Canadian short-term interest rates rose in tandem through January and February, maintaining the gap between Canadian and U.S. rates at roughly 60 basis points in Canada's favour as of March 8.

The prospect of higher rates in the U.S. combined with growing evidence of Canada's strong economic performance increases the likelihood that the Bank of Canada will raise interest rates further to control the pace of growth and inflation.

#### **Short-Term Interest Rates**

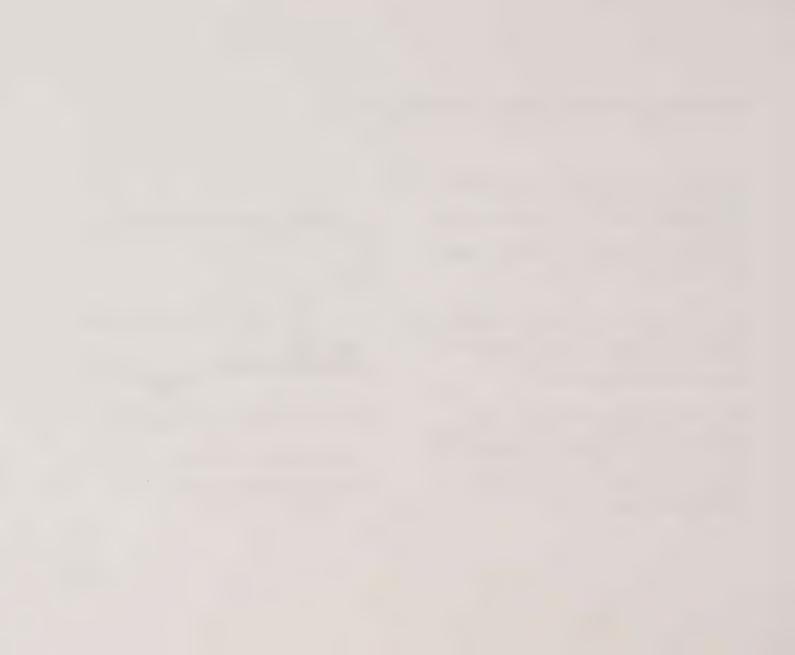


- Canada - U.S. 

□ Differential

Last data point plotted: March 8, 2000

Source: Bank of Canada, 90-day Commercial Paper, last Wednesday in the month



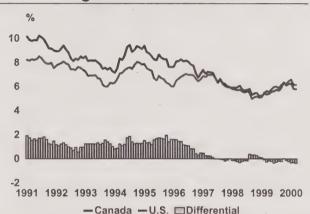
# ...but bonds yields trend lower in early 2000

While inflation fears pushed up North American bond yields throughout 1999, long rates have edged down in the early months of 2000.

Bond yields have been trending down amid market expectations that higher short term interest rates will contain future inflation. An anticipated reduction in the supply of U.S. long bonds as the Treasury retires debt has also helped drive down long term yields on both sides of the border.

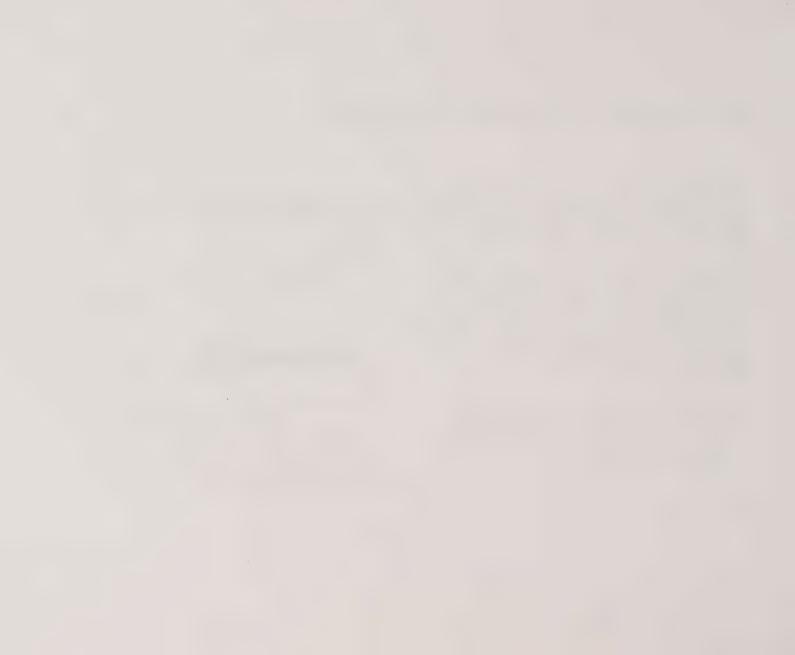
 Canadian long rates have fallen slightly faster than their American counterparts, widening the Canada-U.S. differential to 37 points as of March 8.

#### **Long-Term Interest Rates**



Last data point plotted: March 8, 2000

Source: Bank of Canada, Government long-term bond, last Wednesday in the month



#### And while Canadian stock markets soar...

Canadian stock prices continue to advance in early 2000, building on impressive gains throughout 1999.

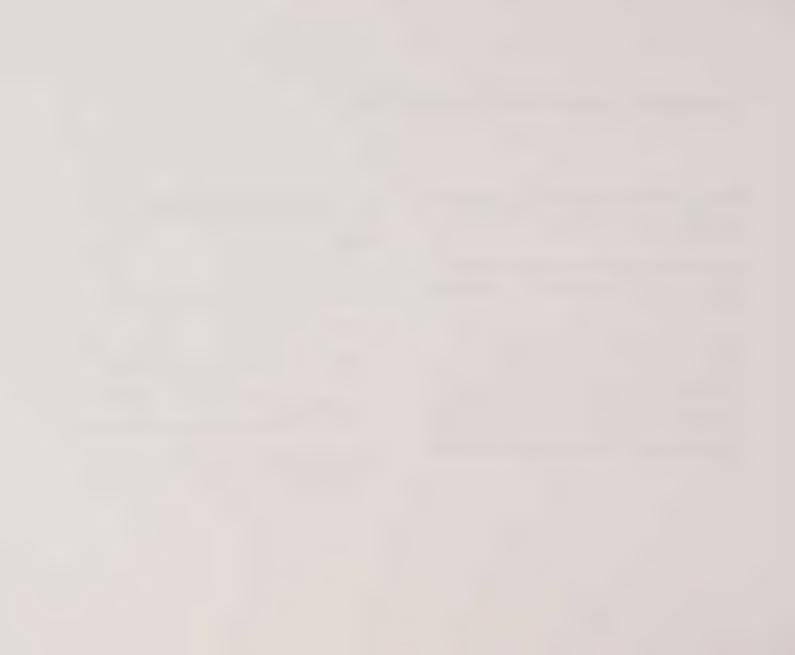
The TSE 300 index hit a new high of 9516 on March 2, bringing total gains since November to just over 21%.

The strength of the TSE in January and February reflects the strong performance of high-tech stocks, which has also boosted the technology-heavy U.S. Nasdaq. In contrast, the more traditional U.S. Dow Jones and S&P 500 indexes struggled in February, tumbling heavily over mounting fears of higher interest rates.

#### Stock Market Indices



Last data point plotted: March 10, 2000



# ...the dollar remains stuck below U.S. 70¢

Over the course of 1999, the Canadian dollar gained roughly 4 cents, reaching U.S. 69.29¢ by year-end. This momentum extended early in the new year, with the dollar climbing to a high of 69.67¢ on January 27.

Following this, however, the dollar weakened somewhat in light of concerns that interest rates will be raised more forcefully in the U.S.

Still, market analysts believe that the dollar will pick up strength through 2000. The stronger-than-expected economy, firming commodity prices and the much-improved fiscal situation should all provide underlying support for the dollar in coming months.

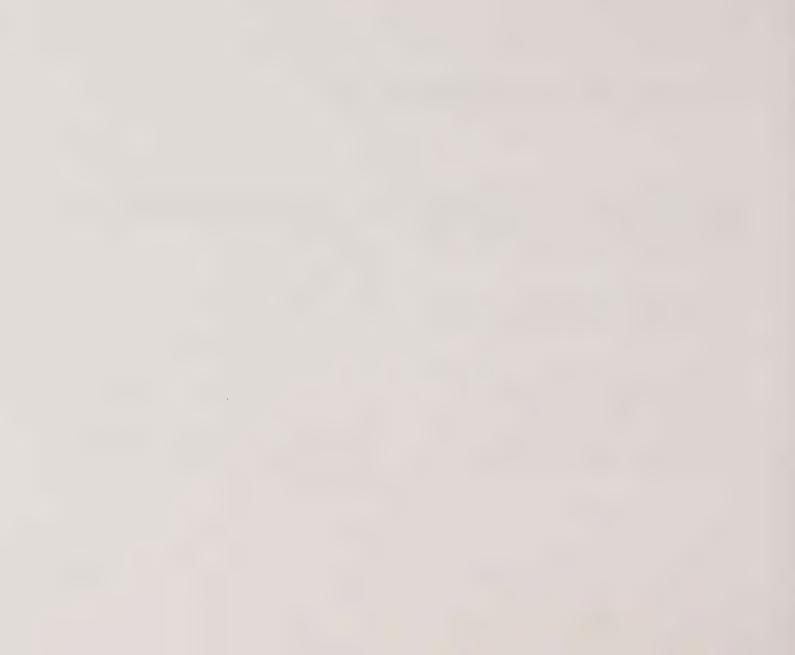
#### Canada-U.S. Exchange Rate



1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

Last data point plotted: March 10, 2000

Source: Bank of Canada



Fiscal Track



# The federal budget remains in the black

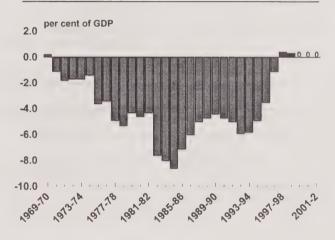
Following a surplus of \$2.9 billion in fiscal year 1998-99 (the second in a row), the federal government expects to post balanced budgets over the next three years. This would entail five consecutive years of budgets in the black – for only the third time since Confederation.

- By the accounting standards used in most other G-7 countries, the federal government will post a financial surplus for the fourth consecutive year in 1999-2000 – the only G-7 country to do so.

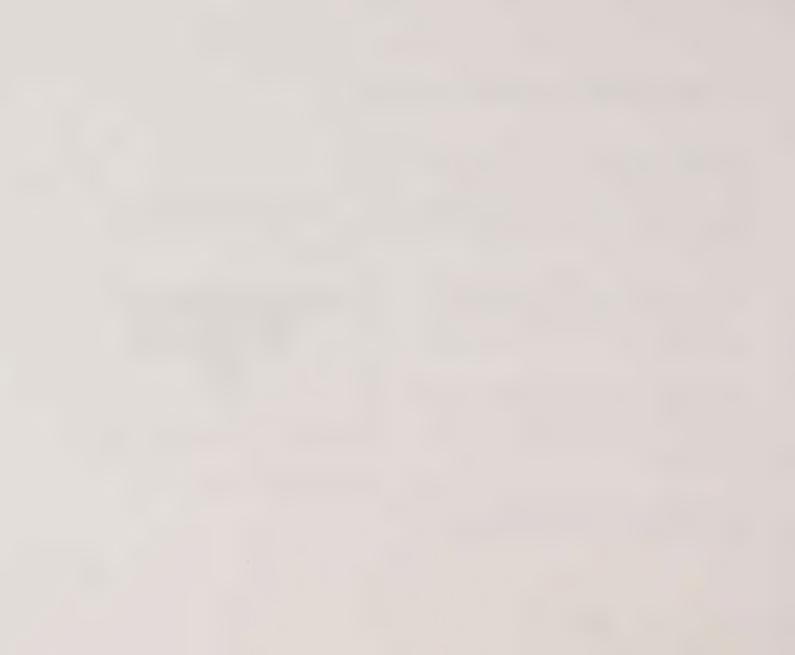
The debt-to-GDP ratio should continue to trend down, sustained by the strong economy and prudent budget planning. From a peak of 71% in 1995-96, this ratio is expected to drop below 50% by 2004-05.

Five provinces and one territory expect to post a surplus in 1999-2000 – P.E.I., Quebec, Manitoba, Saskatchewan, Alberta and Nunavut.

# Federal Budgetary Balance Public Accounts Basis



Source: Department of Finance Canada



Competitiveness



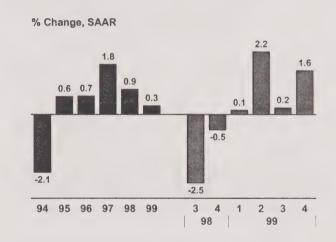
# Unit labour costs rise modestly in 1999...

Unit labour costs increased 1.6% (annual rate) in the fourth quarter of 1999.

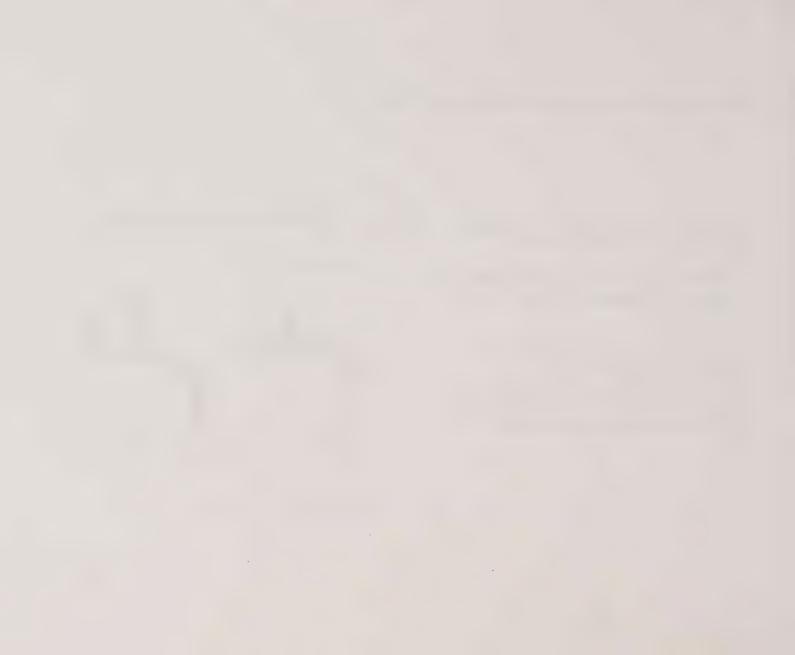
- The total wage bill increased by 6.2% (annual rate), exceeding growth in total output (4.7%).

Despite the fourth-quarter increase, Canadian firms have been quite successful in holding down costs through the year. Unit labour costs rose only 0.3% in 1999, the smallest increase in five years.

#### **Growth in Unit Labour Costs**



Source: Industry Canada calculations



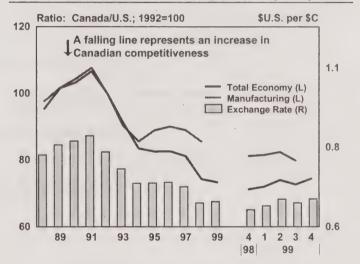
### ...helping to improve Canada's competitive position

At the economy-wide level, and on a common currency basis, Canadian unit labour costs fell 1.3% relative to those in the U.S. in 1999.

In the absence of a strengthening dollar, which rose from an average value of US67¢ in 1998 to US68¢ in 1999, Canada's competitive position would have improved to an even greater extent.

 Unit labour costs in domestic currency rose 1.9 percentage points more slowly in Canada than in the U.S. in 1999 – 0.3% compared with 2.2%.

#### **Unit Labour Cost Comparison (\$US)**



Note: Quarterly manufacturing ULC for 1999Q4 are not yet available. Source: Industry Canada estimates based on data from the U.S. Bureau of Labor Statistics & Statistics Canada



International Accounts



### The current account deficit narrows considerably in 1999...

After posting a small surplus in the third quarter, Canada's current account swung back to a deficit of \$5.0 billion (annual rate) in the fourth quarter of 1999.

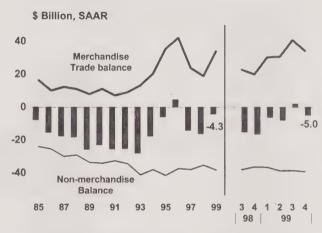
 This reversal was due almost entirely to a lower merchandise trade surplus.

Overall in 1999, however, the current account deficit narrowed significantly, falling from \$16.4 billion in 1998 to \$4.3 billion in 1999. The improvement can be attributed to a sharp increase in the goods surplus.

On the capital account, foreign direct investment totalled \$36.1 billion in 1999, up roughly 50% from the previous year.

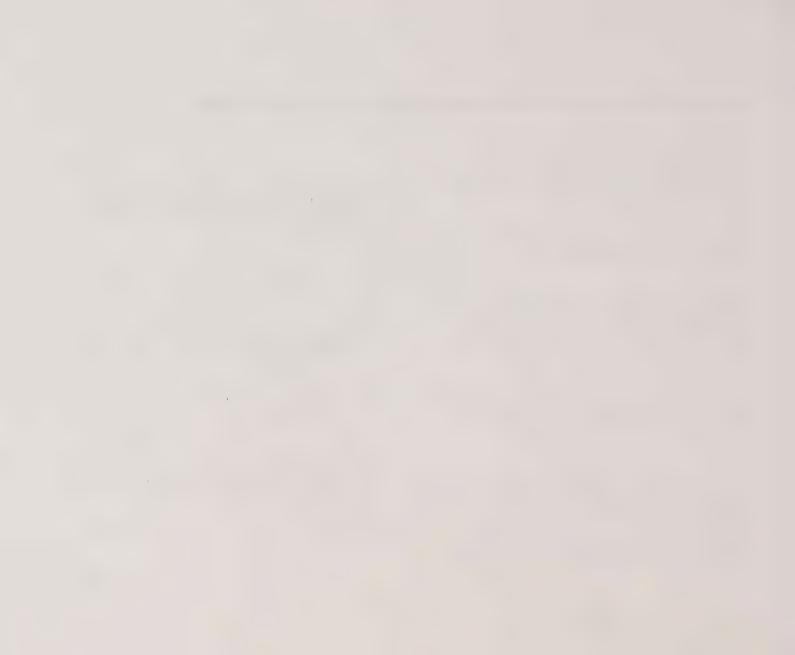
 However, portfolio investment by foreigners fell to a 25-year low, with the reduction concentrated in reduced holdings of bonds and money market papers. Foreign investors continued to invest their holdings of Canadian equities.

#### **Current Account & Trade Balances**



The merchandise trade balance represents net exports of goods.

The non-merchandise trade balance represents net exports of services plus net receipts of investment income and transfers.



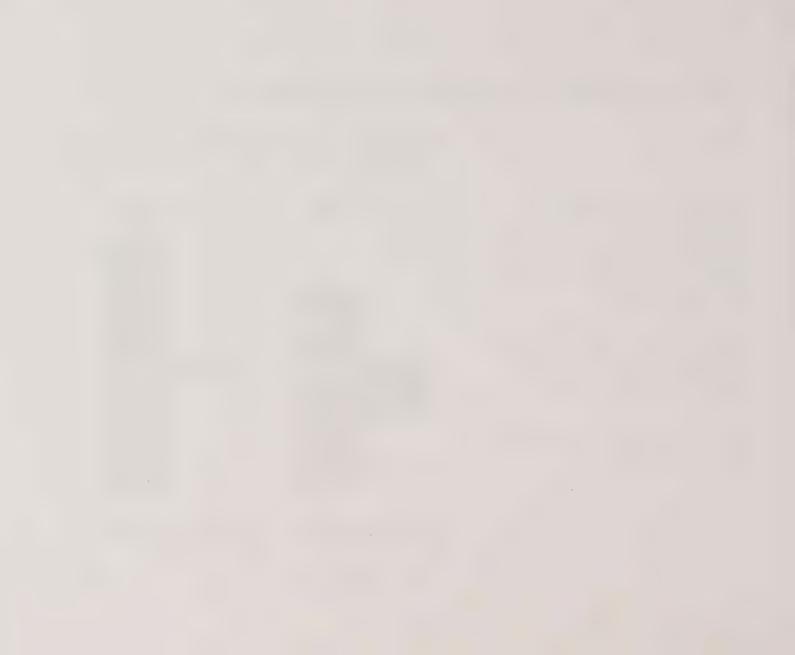
# ...due to a big jump in the merchandise trade surplus

The significant improvement in Canada's current account deficit in 1999 stemmed primarily from a sharp rise in the merchandise trade surplus, which increased to \$33.9 billion (the third largest on record).

A bigger deficit on investment income was generated by profits on foreign direct investment in areas such as transportation equipment and chemicals.

The deficit on trade in services was little changed in 1999.

# Main Components of the Current Account \$ Billion, SAAR 1998 1999 1.1 0.8 33.9 18.9 -4.3 -7.0 -6.6 -16.4 -32.7-29.1 Current Account Balance Merchandise Trade Balance ■ Balance on Services Net Investment Income Net Transfers 1-2



#### Exports to the U.S. advance strongly in 1999...

Merchandise exports reached \$360.6 billion in 1999, an increase of 11.9% from the previous year.

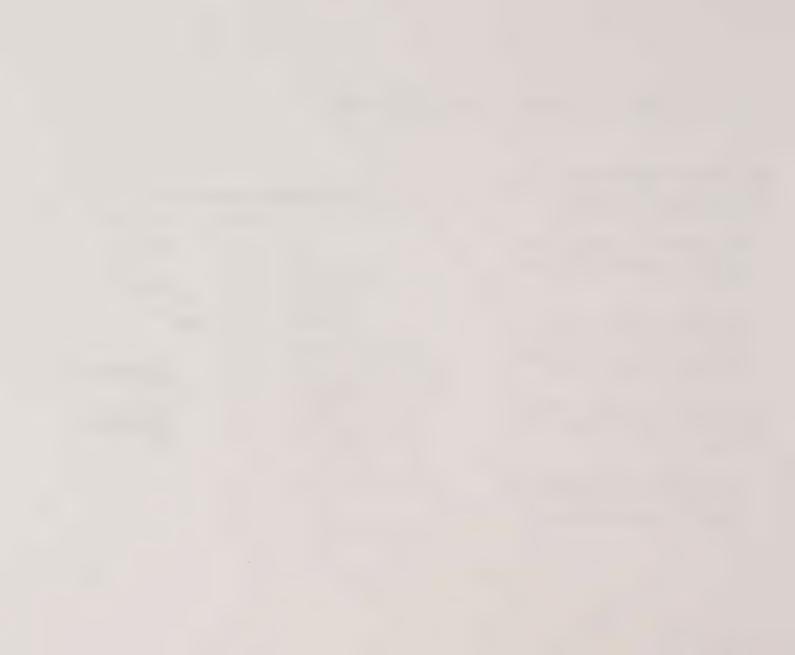
- Sales to the U.S. were up 14.9% on the year, accounting for 85.9% of all exports.
- Exports to the European Union edged higher on the year, but shipments to Japan and all other countries were down.

Increased sales of motor vehicles accounted for half of the total increase for 1999.

 Energy Products also registered a sizeable increase, aided by higher prices for crude oil and natural gas.



Source: Statistics Canada



#### ...leading to a sharply higher trade surplus

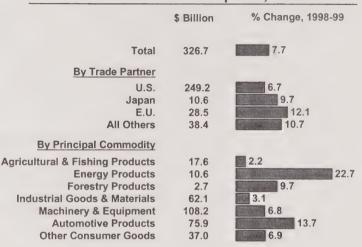
Merchandise imports increased a healthy 7.7% to \$326.7 billion in 1999.

- While export growth was concentrated in the U.S., import growth was more balanced across regions in 1999.
- Import growth was also fairly widespread across major commodity groups. In dollar terms, there were particularly sharp increases in imports of Automotive Products and M&E.

With exports outpacing imports, Canada's merchandise trade surplus reached \$33.9 billion in 1999, nearly double that of last year.

 This improvement is due entirely to a higher trade surplus with the U.S., which reached a record \$60.5 million. In contrast, the deficit with other trading regions also reached a new high.

#### Merchandise Imports, 1999

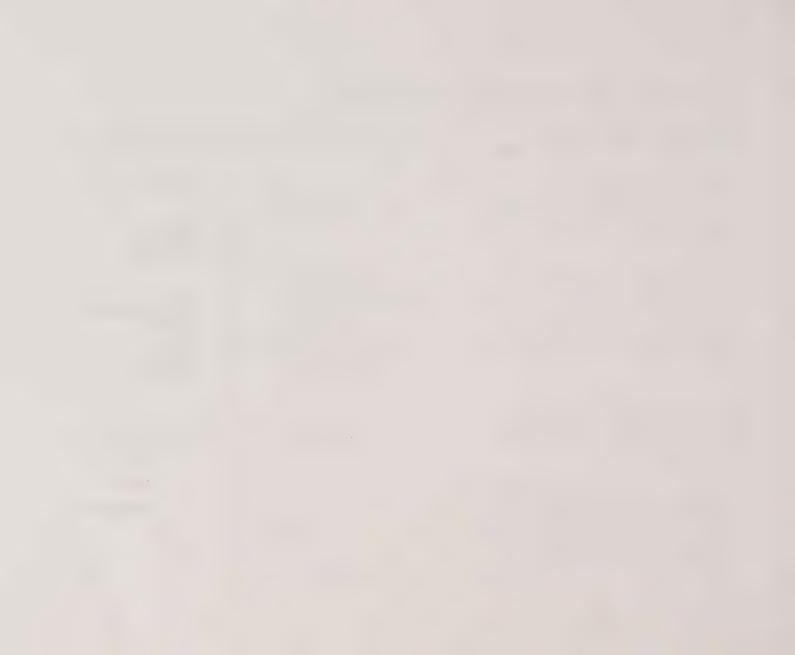


#### Balance by Trade Partner, 1999

	\$ Billion	Change (\$Billion) 1998-99
Total	33.9	15.1
U.S. Japan	60.5 -1.4	-1.2
E.U. All Others	-10.3 -14.9	-2.7 -5.6

Source: Statistics Canada

1-4



**Domestic Scene** 

Sectoral Overview



#### Output gains are broadly based in the fourth quarter and 1999 overall...

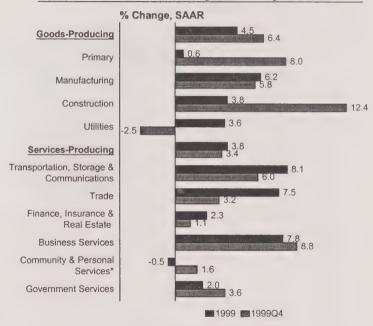
Goods-producing industries increased production by 6.4% (annual rate) in the fourth quarter. Output was up a healthy 4.5% overall in 1999.

- A surge in Construction activity, with notable gains in both residential and non-residential building, led gains in the Goods sector.
- Continued strength in Manufacturing and a strong recovery in the Mining sector also boosted output in the fourth quarter.

Services industries advanced 3.4% (annual rate) in the quarter, bringing the annual gain to 3.8%.

 For both the fourth quarter and 1999 as a whole, Business Services – spurred by higher demand for computer services – and Transportation, Storage & Communications recorded the largest increases.

#### Real GDP Growth by Industry: 1999Q4



Source: Statistics Canada

\*Education and Health & Social Services



#### ...leading to a strong rebound in operating profits...

Corporate operating profits increased 19.8% to a record \$158.1 billion in 1999, rebounding from a sharp fall in 1998.

Firmer commodity prices and strong demand, both at home and abroad, generated higher profits in Manufacturing and resource-based industries.

- Within Manufacturing, motor vehicles, wood & paper and electronics & computer industries all posted sharply-higher profits.
- Profits also rose in the Mineral Fuels industry, boosted by the more than doubling of crude oil prices in 1999.

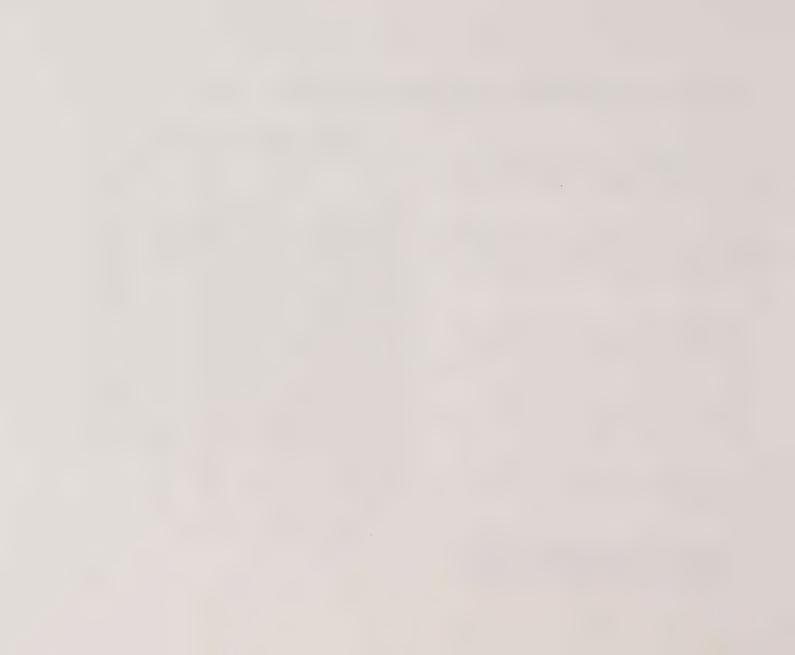
Operating profits in Financial industries fell 11.5% in 1999, their second consecutive yearly decline.

Due to methodological changes currently in progress, data are preliminary and not as reliable as usual.

#### **Corporate Operating Profits**

	1999 Level	Difference 1998-1999	
	(\$M)	(\$M)	(%)
Total - All Industries	158,142	26,110	19.8
Total Non-Financial	114,266	31,824	38.6
Agriculture, forestry, fishing & hunting	1,571	567	56.5
Mineral fuels	6,469	4,225	188.3
Mining except mineral fuels	2,044	-13	-0.6
Utilities (2004) (2004)	3,852	1,267	49.0
Construction	470	-290	-38.2
Manufacturing industries	47,883	13,454	39.1
Wholesale trade industries	, 9,407	4,209	81.0
Retail trade industries	8,272	3,387	69.3
Transportation and warehousing	5,851	924	18.8
Information and cultural industries	5,813	-328	-5.3
Real estate, rental and leasing	6,993	797	12.9
Professional/Scientific	3,624	1,736	91.9
Management of companies	3,421	-567	-14.2
Other services to business	1,776	554	45.3
Education services	46	34	283.3
Health care and social assistance	1,442	229	18.9
Arts, entertainment and recreation	-59	32	35.2
Accommodation and food services	1,330	-151	-10.2
Other services	4,061	1,763	76.7
Total Financial	43,876	-5,714	-11.5
Depository credit intermediation	17,287	-1,361	-7.3
Non-depository credit intermediation	5,554	1,488	36.6
Insurers	3,916	-254	-6.1
Funds and other financial vehicles	13,621	-4,946	-26.6
Other financial intermediaries	3,498	-640	-15.5

Source: Statistics Canada



#### ...and pushing capacity utilization up to its pre-recession peak

Industrial production increased in the fourth quarter to satisfy strong demand in both Canada and the U.S. for consumer and investment-related products.

This higher production pushed up capacity utilization in Non-farm Goods-producing industries to 86.8%, at par with its peak during the 1987-88 expansion.

- Capacity utilization in Manufacturing reached its highest level in over 25 years, and was largely responsible for the overall increase.
- Capacity utilization rates exceeded 90% in Logging & Forestry, Construction and in 8 of the 22 major groups within Manufacturing.

High rates of capacity utilization should eventually ease as productive capacity is expanded by the investment boom.

## Capacity Utilization: Non-farm Goods-producing Industries

	Level (%) 1999	1999/1998 Change	Level (%) 1999Q4	99Q4/99Q3 Change	10-year Average
Total Non-Farm Goods-Producing	84.8	1.5	86.8	1.3	81.7
Logging & Forestry	89.4	9.8	93.5	2.1	81.2
Mining & Quarrying	82.1	-1.0	88.9	6.9	84.3
Crude Petroleum & Natural Gas	71.0	-3.9	70.8	-0.3	80.4
Manufacturing	85.7	1.9	87.8	1.1	81.0
Durable Goods Manufacturing	87.1	2.8	89.4	0.8	80.2
Wood	89.1	2.8	89.9	-1.3	84.0
Primary Metals	92.8	0.9	94.0	2.7	.88.3
Fabricated Metals	83.0	2.4	85.9	2.9	77.0
Transportation Equipment	91.4	5.3	93.0	-1.4	81.2
Electrical & Electronic Products	85.9	3.4	92.1	4.4	78.6
Non-Durable Goods Manufacturing	83.8	0.7	85.6	1.5	81.9
Food Products	81.1	0.4	82.3	0.9	80.1
Plastic Products	85.6	5.6	90.0	3.6	79.3
Paper & Allied Products	91.5	5.4	95.0	2.2	88.8
Printing & Publishing	83.0	1.6	83.6	-0.1	79.7
Chemical & Chemical Products	80.2	-3.5	81.9	1.5	83.4
Construction	88.3	2.4	90.5	2.4	83.2
Electric Power & Gas	85.9	2.0	86.2	-0.9	82.8
Energy	78.9	-0.9	78.8	-0.8	81.8
Total Excluding Energy	86.1	2.0	88.5	1.7	81.6

Source: Statistics Canada



#### Still, investment is expected to be flat in 2000

According to the survey of private and public investment intentions, investment in Plant & Equipment will increase only 0.1% in 2000.

- This expected slowdown, down from growth of 8.1% in 1999, partly reflects the recent completion of large capital projects.

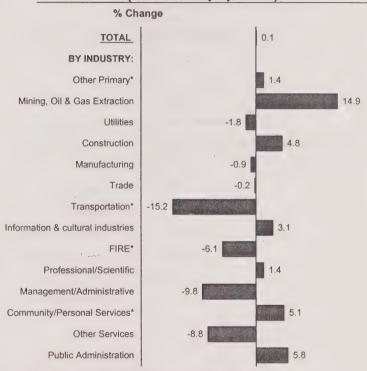
By industry, the biggest gain will take place in the Mining sector, with higher prices for oil expected to more than double drilling activity in comparison with the same period in 1999.

Higher spending at the municipal level is expected to provide a significant boost to government capital spending.

However, investment in Manufacturing is expected to remain at roughly the same level as last year, despite high rates of capacity utilization.

The large expected decline in Transportation is related to the winding down of several major pipeline projects.

2000 Investment Intentions by Industry (Plant & Equipment)



Source: Statistics Canada Survey of public and private investment intentions

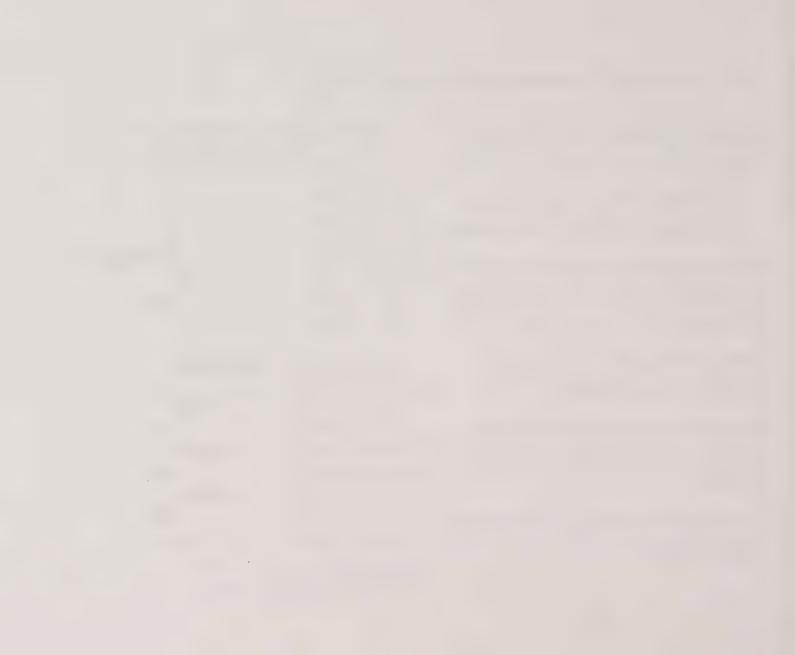
Transportation includes warehousing;

FIRE: Finance, Insurance, Real Estate & Leasing:

Community/Personal Services: Education and Health & Social Services.

J-4

<sup>\*</sup>Other Primary: Agriculture, Forestry, Fishing & Hunting;



## 1999 employment gains are concentrated in Manufacturing and Services...

Employment in the Goods-producing industries was up 136,000 in 1999.

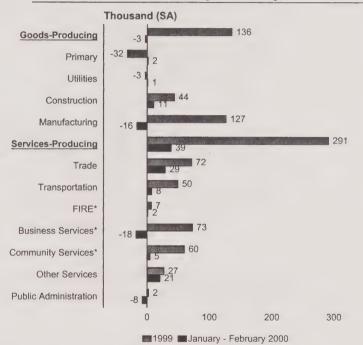
 Consistent with output trends, these job gains were concentrated in Manufacturing and Construction. Losses in Agriculture pulled down employment in the Primary industries.

In Services-producing industries, 291,000 new jobs were created in 1999.

 These gains were widespread, with notable increases in both Business and Community Services. Employment in Transportation and Wholesale & Retail Trade benefited from the surge in Manufacturing activity.

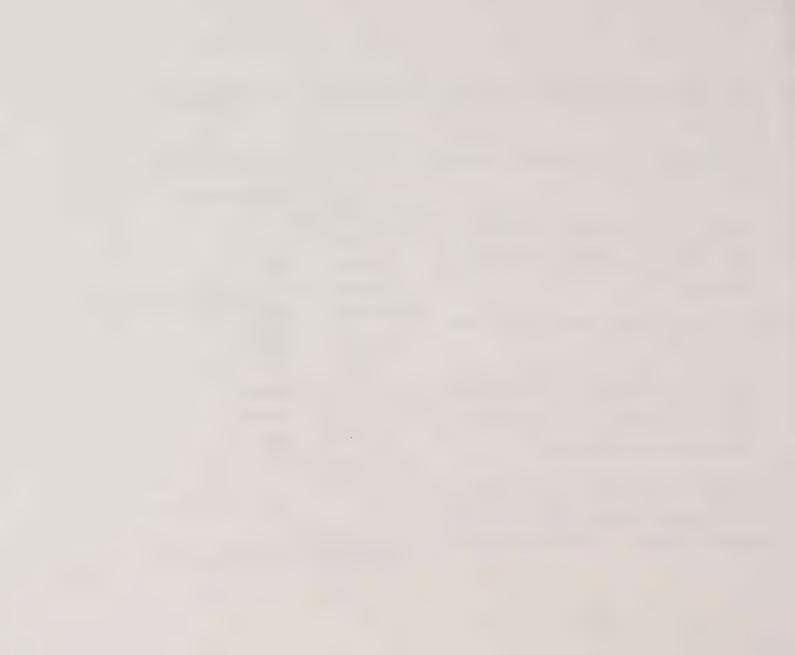
Manufacturing employment has fallen back somewhat over the first two months of 2000, but this has been more than offset by higher employment across most Services industries.

#### Job Growth by Industry

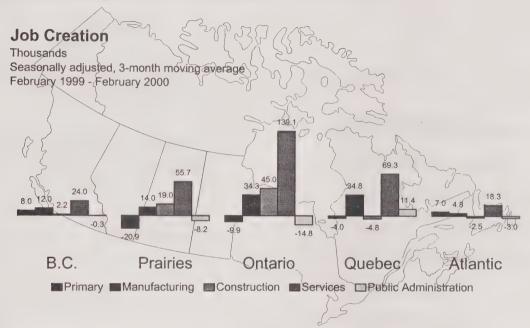


#### Source: Statistics Canada

\*FIRE: Finance, Insurance, Real Estate and Leasing
Business Services: Management, Administrative, Professional, Scientific & Technical Services
Community Services: Educational Services, Health & Social Assistance.

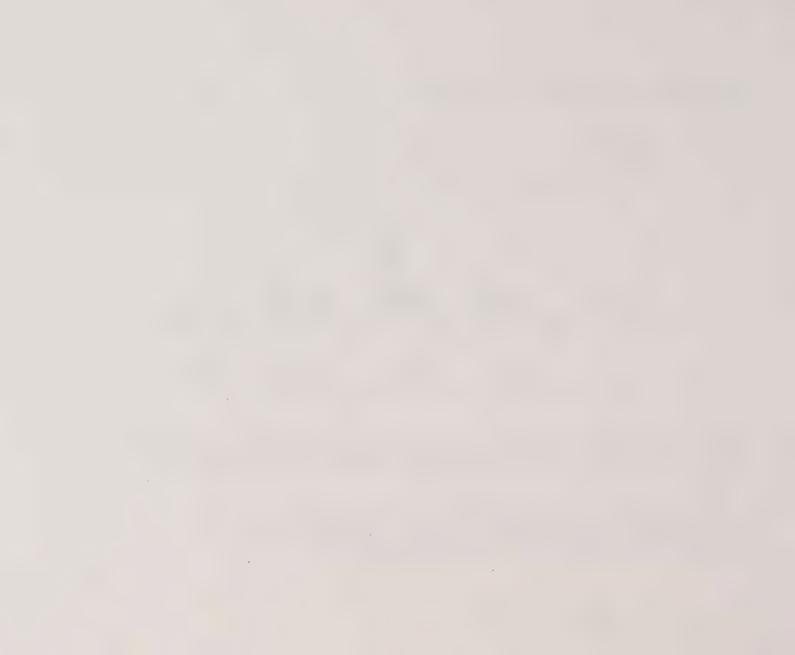


#### ...throughout all regions of Canada...



Services-producing industries have accounted for over half of the total net job gains in each region since last February. Employment in Manufacturing was also up in every region.

Employment in the Primary sector edged down in Central Canada and the Prairies (where the bulk of the decline was concentrated in agriculture), while Public Administration recorded losses everywhere but in Quebec.



#### ...as wage settlements picked up in most sectors

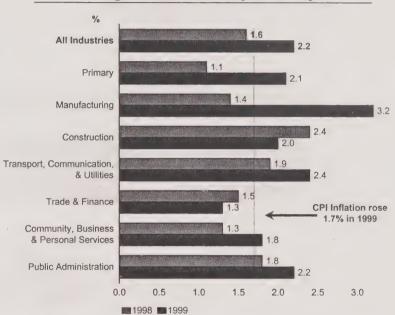
Wage settlements averaged 2.2% in 1999, up from 1.6% last year. For the second straight year, settlements have exceeded inflation.

- The biggest wage settlements tended to be in Manufacturing and Transportation, Communication & Other Utilities.
- Construction and Trade & Finance were the only industries for which average settlements ran behind last year's pace.

The increase in wage settlements was much more pronounced in the private sector in 1999.

- After narrowing considerably in 1998, the gap between wage settlements in the private sector (2.6%) and the public sector (1.9%) widened in 1999.

#### Wage Settlements by Industry



Effective average annual adjustments in base wage rates from major collective bargaining agreements.

Source: Human Resources Development Canada



# Challenges of Rapid Technological Change





#### Technological change has always been with us...

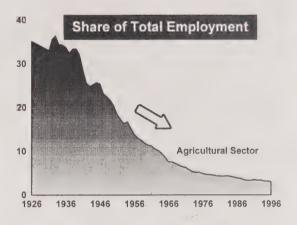
Technological change is continually impacting and reshaping our economy.

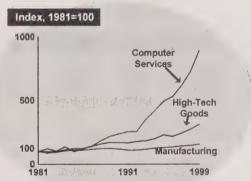
At the start of this century, agriculture contributed a large share of our economy.

Since then, manufacturing and then services grew in relative prominence — sparked by new technologies which permit more efficient ways of producing new or better products and services.

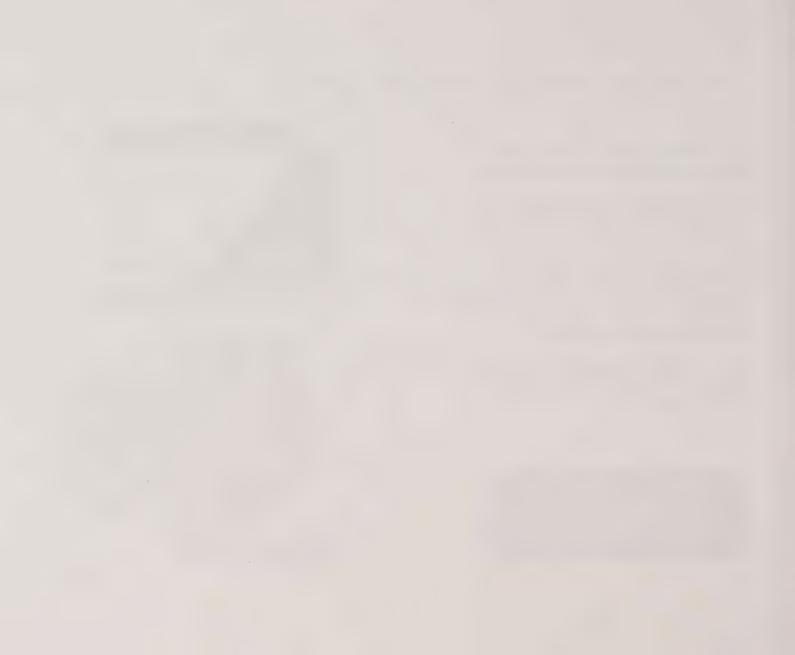
More recently, high-tech services and goods are eclipsing other industries in terms of growth.

Technological advance is transforming the Canadian economy, and changing the very basis of our livelihood.





- 1) Manufacturing does not include high-tech goods
- 2) High-tech goods include pharmaceuticals, communications & elec. equip., and computers Source: Statistics Canada



#### ...but now is extremely rapid

Technological advances are now altering our economy at an unprecedented pace.

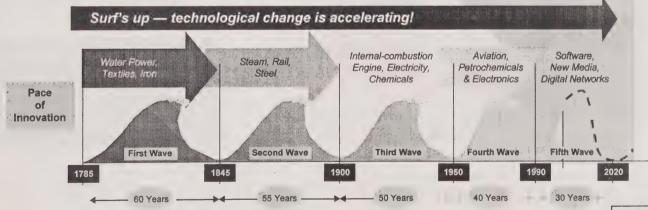
It's a new business world, where everything is changing. More than ever, business must react quickly to seize the opportunities resulting from change.

### A new economy

Based on new ideas and opportunities

Digital business
Electronic banking
Tele-work

E-biz



Source: The Economist, February 20, 1999.

K-2



#### Impacting even "traditional" industries

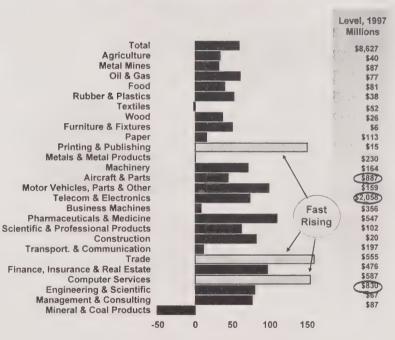
In fact, virtually <u>all</u> industries are undergoing major changes in technologies.

This is contributing to improvements in product quality, and in the increased versatility and flexibility of our industries.

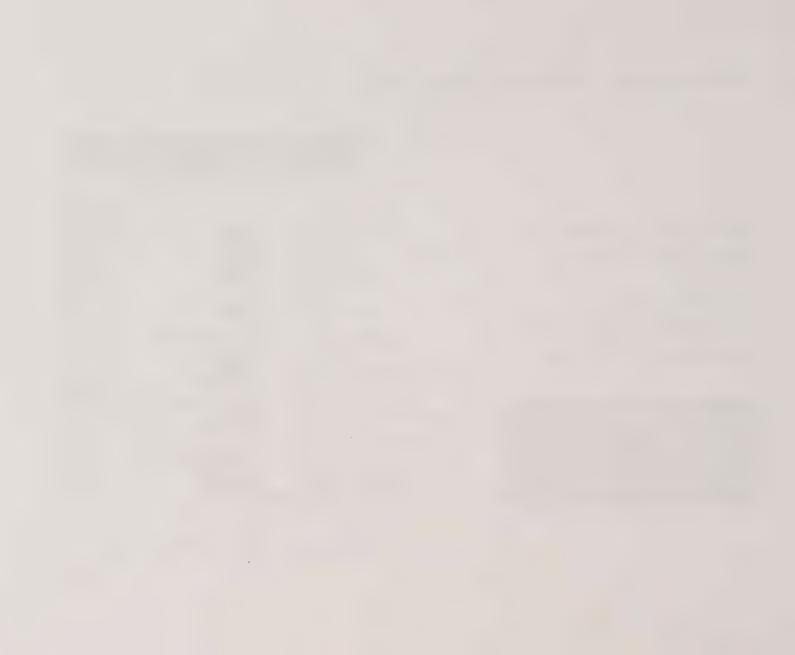
Technological change is embraced even by Canada's traditionally strong resource sector. In fact, resource extraction is becoming quite knowledge-intensive.

#### Even Mature Industries Are Becoming More Knowledge-Intensive

Growth in R&D Spending, %, 1991-97



Note: These are actual R&D expenditures, not preliminary estimates or intentions. Source: Statistics Canada, Industrial Research & Development, 1997 Intentions



#### Innovation is now key to future prosperity

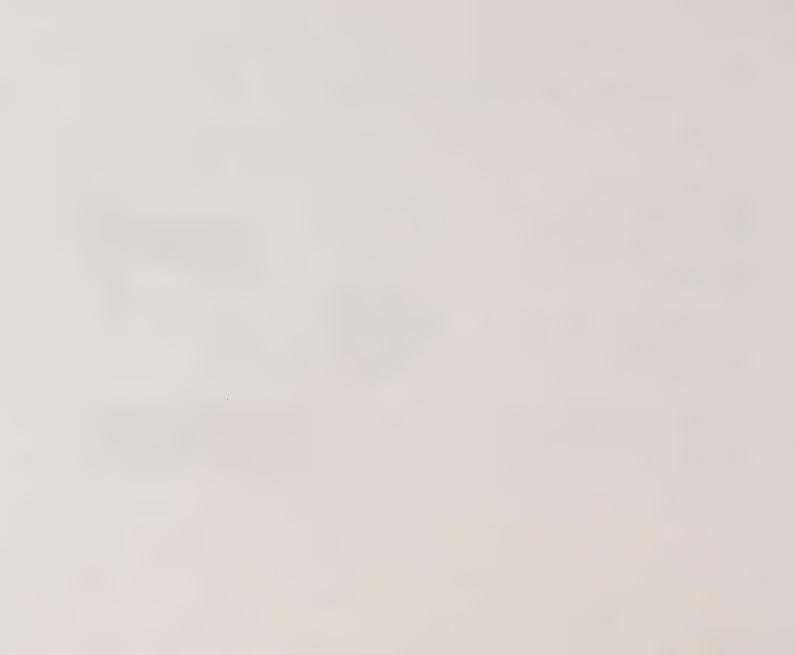
As we move to a more knowledge-based global economy (KBE), comparative advantage relies less on natural resources and more on what we can do with those resources.

Canada's future prosperity depends on rapid innovation, and on winning races to foster new and better products and services.

Competitors in other countries are pressing Canadian industries and companies to step-up their pace of innovation.



To take advantage of rapid technological change, you have to be quick — <u>speed</u> wins!

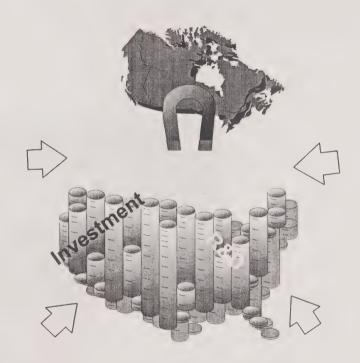


# There are special challenges being next door to the world's foremost KBE

In these races, we find ourselves competing with our neighbour, the U.S. — a clear worldwide technology leader and premier KBE, home to the world's richest pools of R&D and investment.

This sometimes makes more challenging our task to pursue/attract:

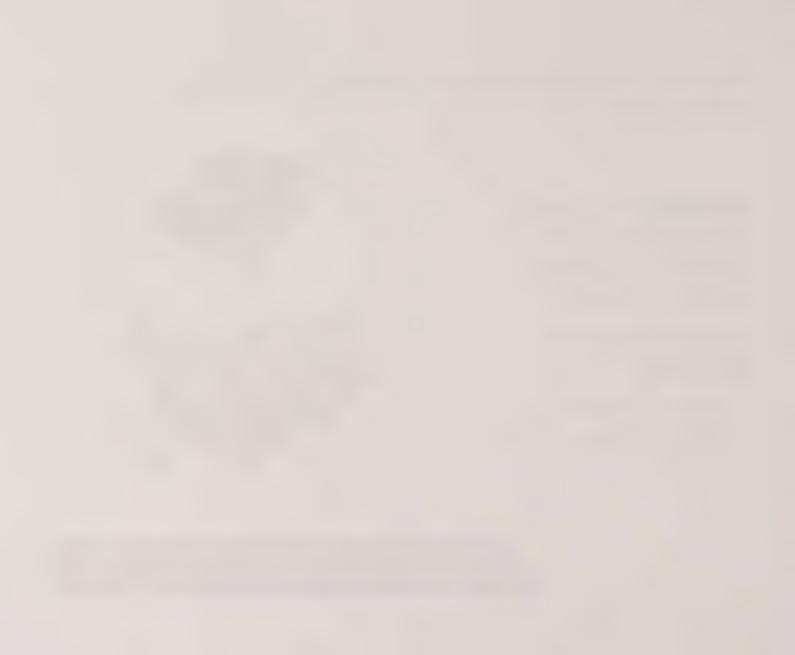
- emerging opportunities;
- investment; and
- high-knowledge activities.



But what are the key characteristics of technological change?

And how is the U.S. doing better? ...

K-5



# Dimensions of Technological Change





#### We are seeing unparalleled increases in innovation...

- The

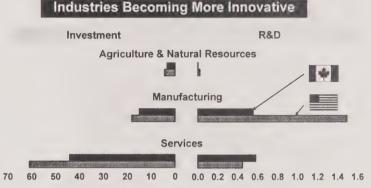
The impact of technological change is highlighted by the fact that industries generally are becoming more innovative.

This trend is reflected in higher investment, especially in R&D.

But our overall investment and R&D rates remain low relative to those in the U.S.

 Canadian companies (especially SMEs) are slower than their U.S. counterparts at adopting leading-edge methods and processes.

Overall, Canadian companies are about half as likely to be technologically advanced as their U.S. counterparts.



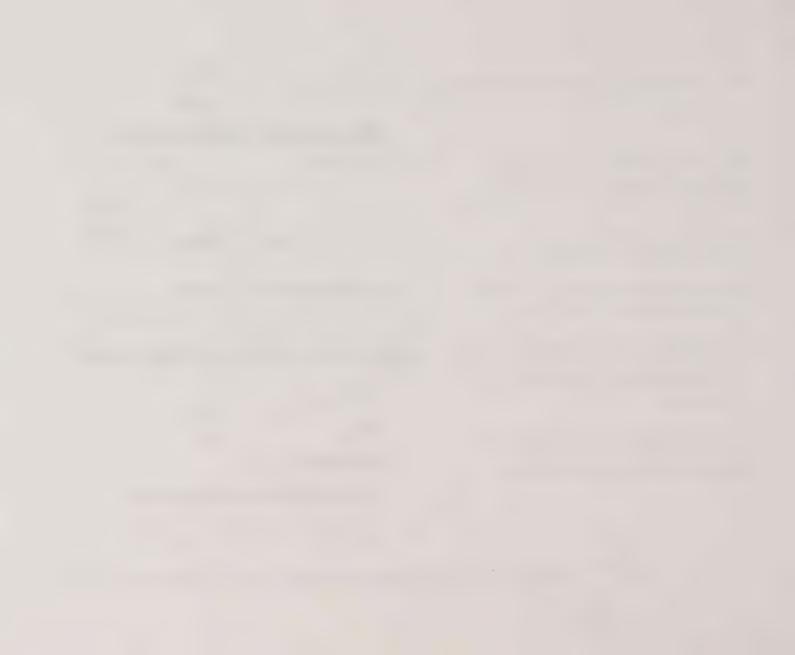
Investment: Ratio of Investment Stock to GDP, 1996; R&D: R&D spending as % of GDP, 1997. Source: Industry Canada compilations based on OECD data

# Technology Adoption in Canada and the U.S. Firm Size All 20-99 100-499 500+ 10 30 50 70 90 % Adopting Five or More Advanced Technologies, 1993

Source: Baldwin and Sabourin (1995), "Technological Adaptation in Canadian Manufacturing (Statistics Canada)



...but the U.S. economy remains more innovative L-1



# And we see greater inventiveness.



Patenting activity in most industrial countries is growing faster than ever before.

And Canada's propensity to file for domestic patents is growing very fast — first in the G-7.

However, Canada's relative propensity is still low in absolute terms, relative to other countries — even after including patents in the U.S.

In recent years, there has been a fast rise in <u>foreign-bound</u> patenting in Canada. Canada's growth in foreign-bound patenting ranks second only to the U.S. among the G-7.

## Inventiveness Coefficient, 1996



\* Japan data adjusted to be comparable to the other countries

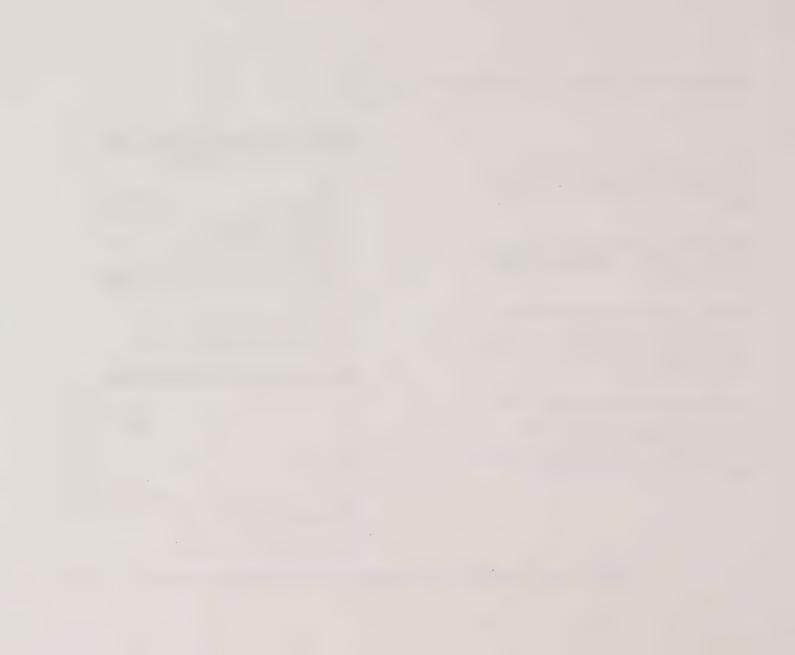
Source: OECD Main Science & Technology Indicators

\*\* This is an overestimate of Canada's inventiveness because patent applications may be filed on the same inventions in both countries. Source: Industry Canada compilations based on OECD data

#### Growth in Foreign-Bound Patenting **Applications** 1996 Index. 1990=100 1,175,107 380 340 65.651 300 235.862 260 220 France 120.043 Italy 180 52.033 Germany 140 261,444 Japan 193,451 100 60 90 91 92 93 95



but the U.S. economy remains more inventive

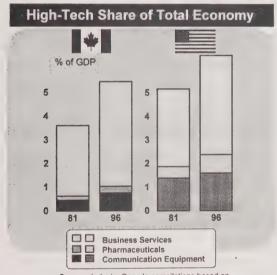


## There is rapid growth in high-knowledge activities...

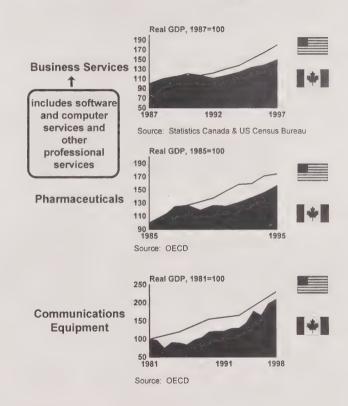


High-knowledge/tech activities are growing quickly and are playing a greater role in our economy.

However, in the U.S. they comprise a larger share of the economy and are expanding at a faster rate.

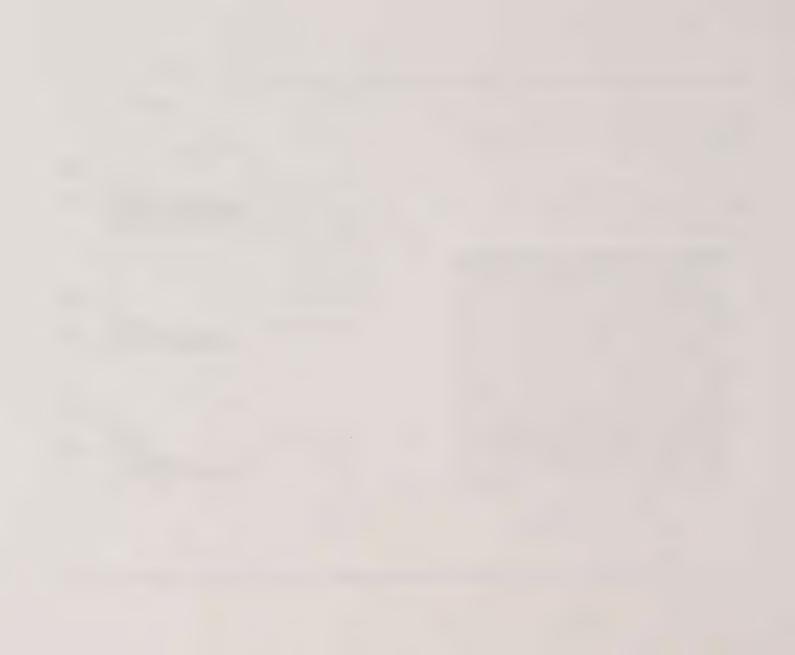


Source: Industry Canada compilations based on Statistics Canada and US Census Bureau data





but U.S. high-tech sectors are larger & more vibrant [L-3]

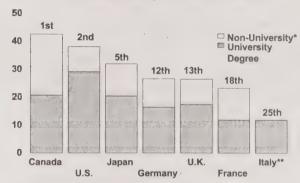


# Knowledge workers are growing in importance...

As a consequence of technological change, there is also a growing number of workers involved in knowledge discovery and application. Our unprecedented ability to store knowledge and retrieve it rapidly using information technology has shifted the economy's demand toward workers with advanced training or education.

Canada will need more knowledge workers, including professionals such as engineers and architects, as well as college-trained technologists for manufacturing, communications, information technology and other fields.

# Share of labour force aged 25-64 with a post-secondary education, 1998



<sup>\*</sup> Excluding post-secondary non-tertiary education

<sup>\*\*</sup> Includes both university and non-university education Source: OECD, Education at a Glance, 2000

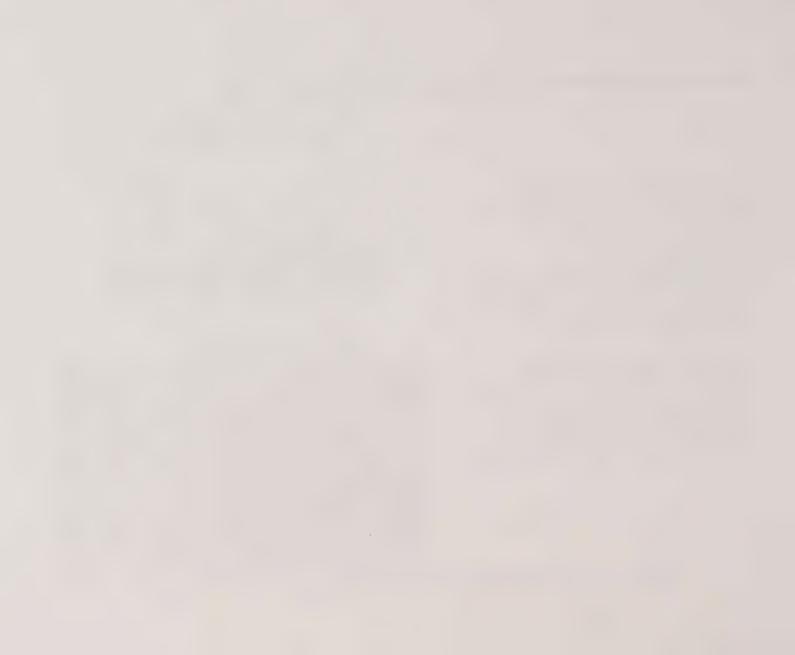
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Researchers per 1000 labour force, Canada 1995, U.S. 1997	
1 Page 10 10 10 10 10 10 10 10 10 10 10 10 10	. 8.1
Percentage of 24 year-olds with University Degree	
Male 1000000000000000000000000000000000000	29.3%
Percentage of 24 year-olds with University Degree Male 27.2% Female 37.6%	36.7%
Proportion of 24-year-olds whose	
1st University Degree is awarded in S&E	
Among Males 7.3% Among Females	6.9%
Among Females 3.6%	3.8%

Source: Statistics Canada, U.S. Bureau of Labor Statistics, U.S. National Science Foundation



but the U.S. has more university-schooled workers



## There are many new & emerging industries ..

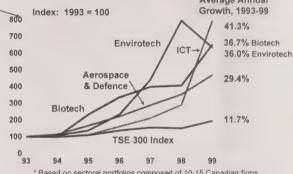


Technological developments have resulted in a proliferation of new industries.

Many will likely be critical to tomorrow's economic performance and the everyday activity of business.

The growth of high-tech shares traded on the TSE has far exceeded the TSE average many growing at twice the average rate and Envirotech growing at nearly four times the average rate.

#### Canadian Market Capitalization\* 1993 to 1999 Average Annual Index: 1993 = 100



\* Based on sectoral portfolios composed of 10-15 Canadian firms Source: TSE

# Emerging industries —

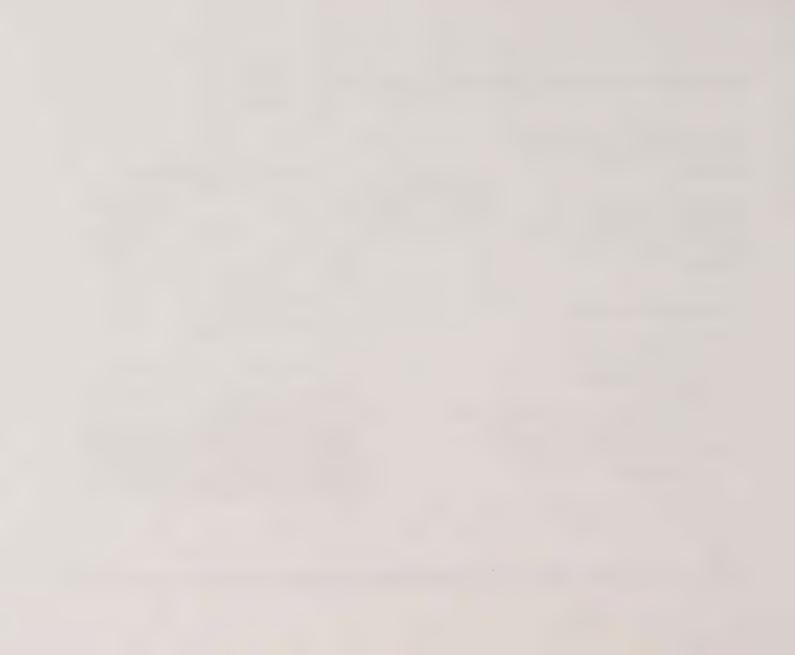
**Biopharmaceuticals Bio-Agriculture Bio-Aquaculture Bioforestry** Information and Communication Technologies (including E-biz) **Environmental Technologies** Telehealth Aerospace

Growing on average 21/2 times total GDP





but many of the U.S. industries are proportionately larger L-5



# Strong ICT technological infrastructure is paramount...



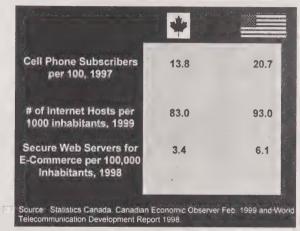
The U.S. is a clear worldwide technology leader when measured against several traditional and new comparative benchmarks.

Virtually all households in Canada have access to traditional modes of communication such as telephone and basic cable TV.

However, Canada has the lowest telephone & Internet access charges in the G7!!

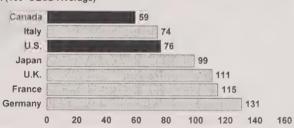


### Indicators of ICT Infrastructure



## Telephone and Internet Access Charges, 1998

Index (100=OECD Average)



Source: OECD Communications Outlook, 1999. US\$, PPP indexed to OECD average. Based on blend of 20 peak and 20 off peak hours online.



but the U.S. is a leader

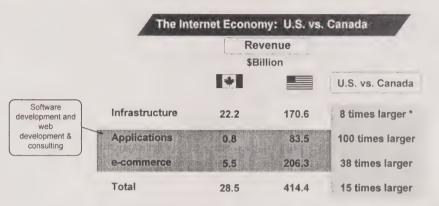


## And the U.S. is taking better advantage of the Internet...

The Internet economy in Canada, although growing rapidly, still composes a smaller share of overall economic activity than in the U.S.

Based on a 10 to 1 ratio, Canada's Internet economy is only living up to its potential in the area of infrastructure for the Internet economy.

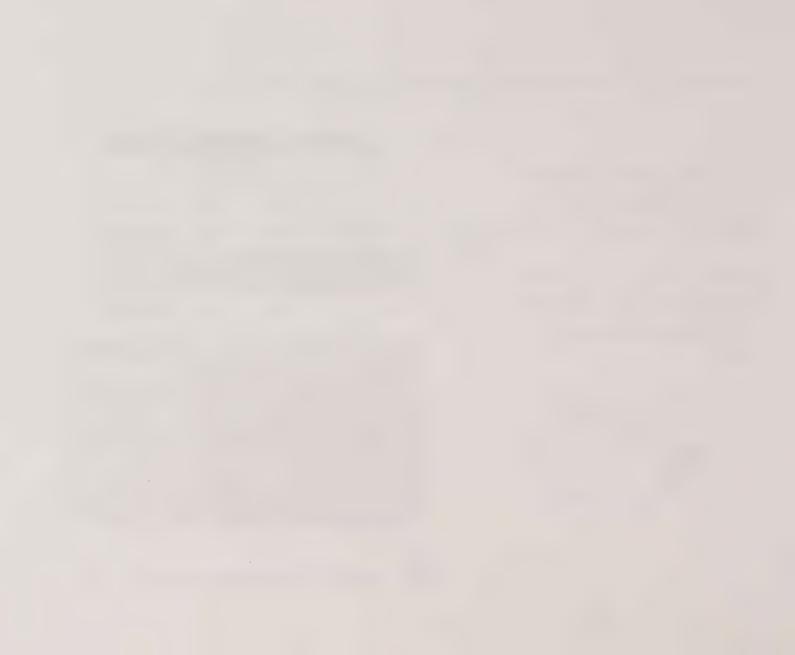




	1+1		U.S. vs. Canada
nfrastructure	70,400	473,000	7 times larger *
Applications	7,400	408,000	55 times larger
-commerce	17,300	762,000	44 times larger
otal	95,100	1,478,000	16 times larger



.and the Internet economy



# The Internet is now a strategic business priority...



## The Borderless Nature of the Internet

Canadian spending on-line, 1999



Retailers conducting commerce online, 1999
50%

26%

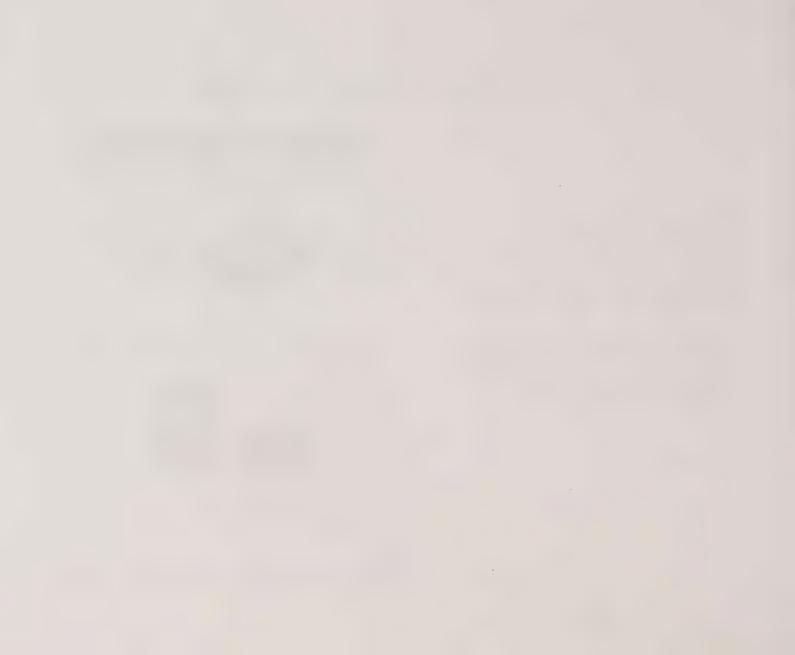
Source: International Data Corporation, 1999

Canadians are spending a lot on merchandise at American sites.
Excluding financial transactions and travel-related online purchases,
Canadian consumers spent 63% of their online dollars at U.S. Websites in 1999.

 And only 26% of Canada's 200 largest retailers offered Web-based shopping last year, compared with about 50% of comparable retailers in the U.S.



.but more so in the U.S.



While e-biz is taking off in Canada...

canada com chapters on

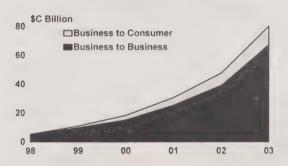
A significant feature of our new global and information-driven environment is the rapid growth in e-commerce — and e-Biz is still just in its infancy.

E-biz will impact on a substantial part of everyday activity, from retail to trading relationships.

Carolar com

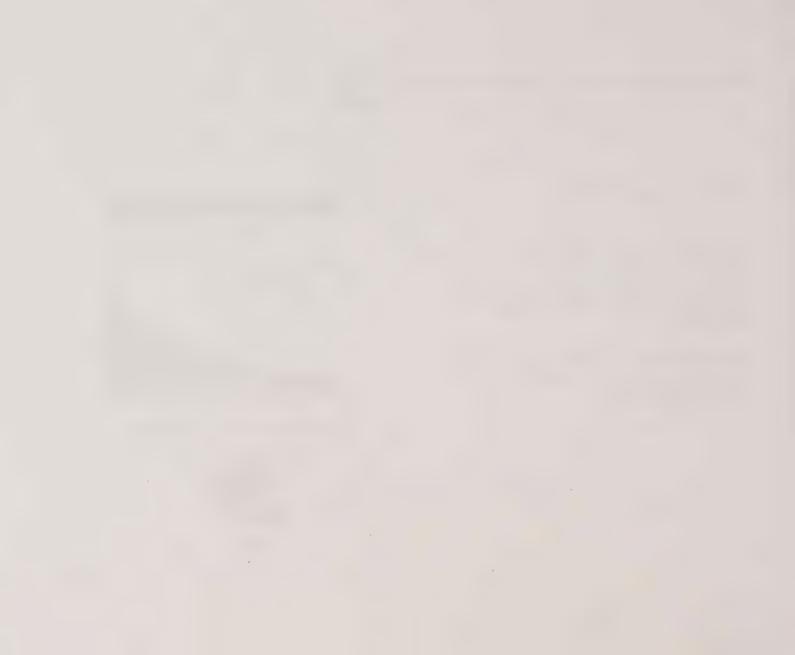
### E-commerce market and forecast

Canada



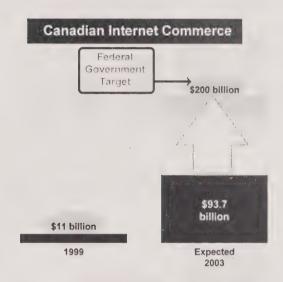
\* Source: International Data Corporation (1999) and The Boston Consulting Group



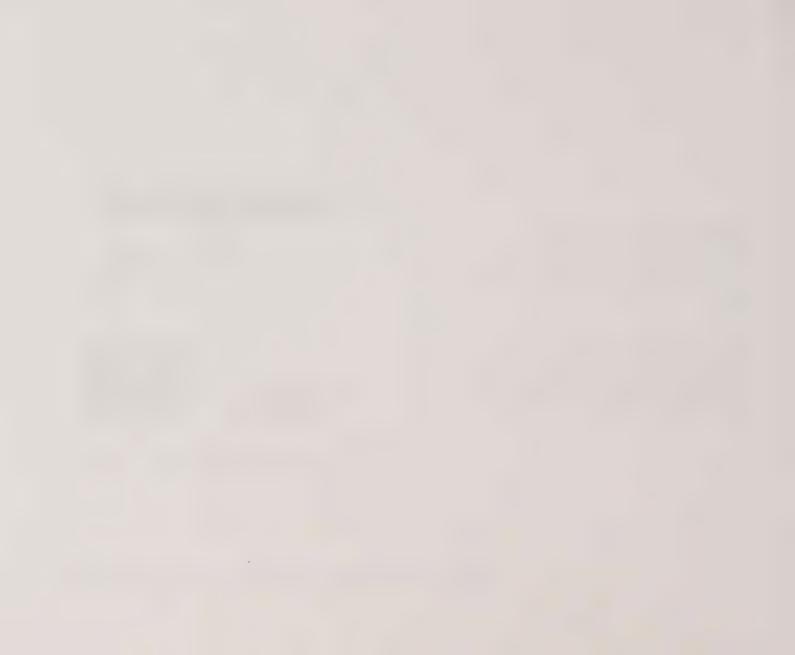


Canada's Internet commerce is expecting rapid growth. Recent forecasts has it jumping to \$93.7 billion by 2003, from around \$11 billion in 1999.

However, the government is setting a new goal for the year 2003 — for Canada to capture a 5% share of world e-commerce, which would mean doing \$200 billion of business in this way.



Source: Boston Consulting Group calculation based on figures in Report of the Canadian E-Business Roundtable, 2000



# However, in public "cyberspace", we compare well

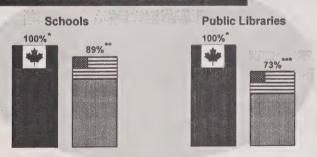


We see the pervasiveness and "quality" of our ICT technological infrastructure increasing dramatically.

By the end of March 1999, virtually all public schools and libraries in Canada were connected to the Internet, and presently there are almost 4,300 community access sites.

#### Schools Connected to the Internet 100% 15 000 13 000 11 000 7 000 3 000 0 1994 1995 1996 1997 November March 1998 1999

## Percent Connected to the Internet



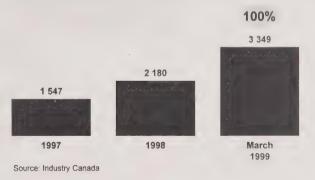
\* March 1999

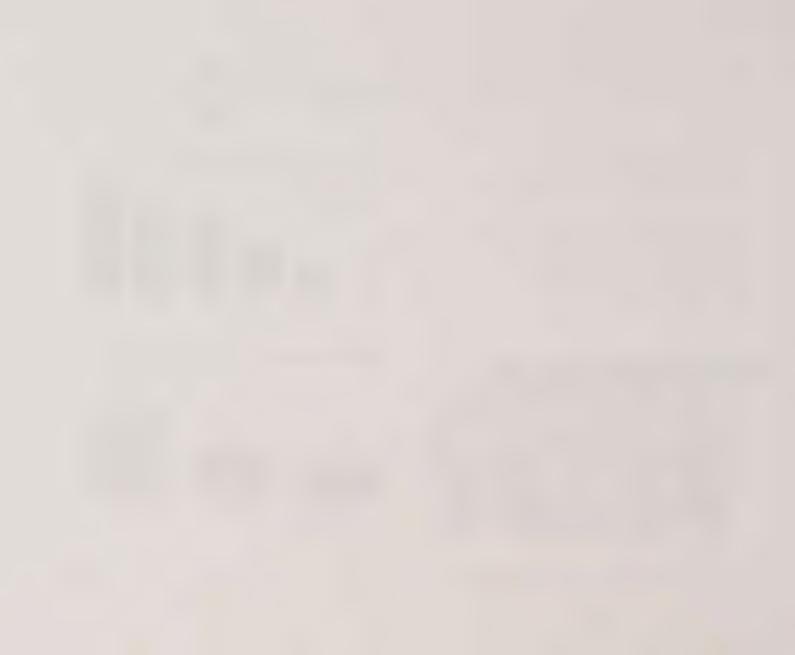
\*\* Based on Survey in Fall 1998

\*\*\* 1998

Source: IHAB, Industry Canada, National Centre for Educational Statistics, U.S. and 1998 National Survey of Public Library Outlet Internet Connectivity, U.S.

## **Public Libraries Connected to the Internet**





# Challenges & Prospects





## Unprecedented times, unprecedented challenges

Rapid technological change and the ensuing rise in importance of innovation involve many challenges.

## For instance, faster innovation requires:

9

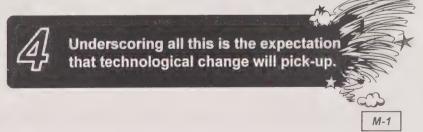
- more capital
- abundant new skills and
- a greater capacity to create new ideas.

2

Canada also needs to "commercialize" more of its ideas.

3

Other concerns include the impact of technological change on the commonality of standards and on corporate/industrial restructuring.





## Increased innovation requires more capital..



To take advantage of new knowledge and ideas, it is mandatory that business, and economies generally, undertake more investment:

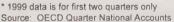
- in R&D (new knowledge creation)
- in revitalizing / rebuilding plants and equipment that facilitate new technologies and the production of new goods and services.

Canadian investment is not keeping pace with that in the U.S., plus we are attracting a smaller share of Northern American FDI, including by U.S. MNEs, who are increasing their investment in the U.S. at a faster clip.

 More high-tech Canadian companies are going to the U.S. to obtain capital.



Investment in M&E 88 89 9 as Share of GDP \* 1999 data



Canada's Share of North American FDI \*



\* Includes FDI received by Canada, the U.S and Mexico from all sources Source: OECD and UN



but U.S. business is investing more in innovation



## We need more workers with front-line knowledge..

The efficacy of investment depends on the availability of highly skilled professionals.

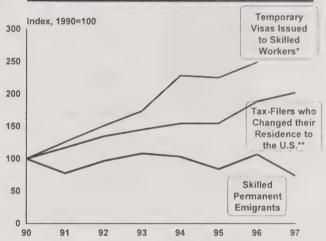
We need to prepare Canadian students for the 21st century. That challenge has never been tougher, given the rate at which established technologies are changing and new ones emerging.

Plus, we need to attract/keep the best — people who are at the "cutting-edge". But we are finding that many of our "best and brightest" are going to the U.S., attracted by better job opportunities, higher incomes, and lower taxes.

## Composition of Permanent Emigrants, 1997

	Percent	Number
Executives & Managers	37.5	1,866
Engineers, Computers & Natural Scientists	* 18.4	916
Artists & Social Scientists	11.2	555
Nurses	11.0	545
Teachers & Professors	8.2	406
Doctors	8.0	398
Other health occupants	5.8	291

## Estimates of the Growth in Emigration to the U.S.

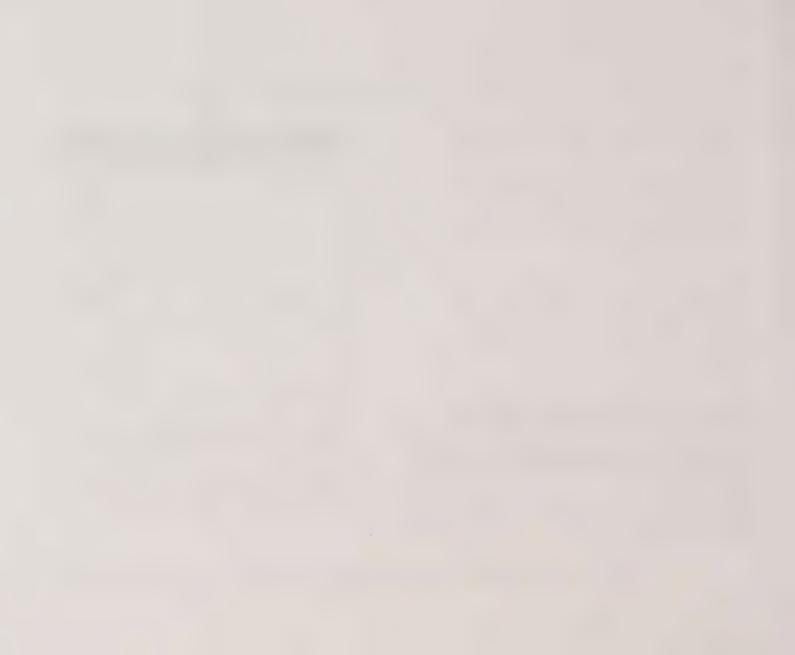


Combining evidence from tax records and temporary visas with permanent immigration data clearly shows a significant rise in highly skilled workers leaving Canada.

\* Admissions of temporary workers in professional occupation visa classes (NAFTA (TN), professional worker (H-1B) and intracompany transferees (L)) \*\* Statistics Canada estimated share of total emigrants (50%) Source: Statistics Canada, U.S. Immigration and Naturalization Service



...but we fear we are losing our 'best & brightest'



# We must carry-out R&D and "create" ideas..



Business Expenditures on R&D, 1997 \$US \$153.7 Billion

By improving the capacity for R&D, we support the source of the new ideas that will lead to new activities and more value-added products and services — that in turn contribute to more high-skill employment and overall prosperity.

We must become, to a greater degree, creators in our own right.

Right now, our R&D remains considerably below that of the U.S. and many other industrialized countries.





Business Expenditure on R&D, % of GDP

	1981	1985	1990	1996
Canada	0.6	0.8	0.8	1.0
U.S.	1.7	2.1	2.0	1.9

Researchers per 1,000 Labour Force
1995 for Canada and 1997 for the U.S. 8 1

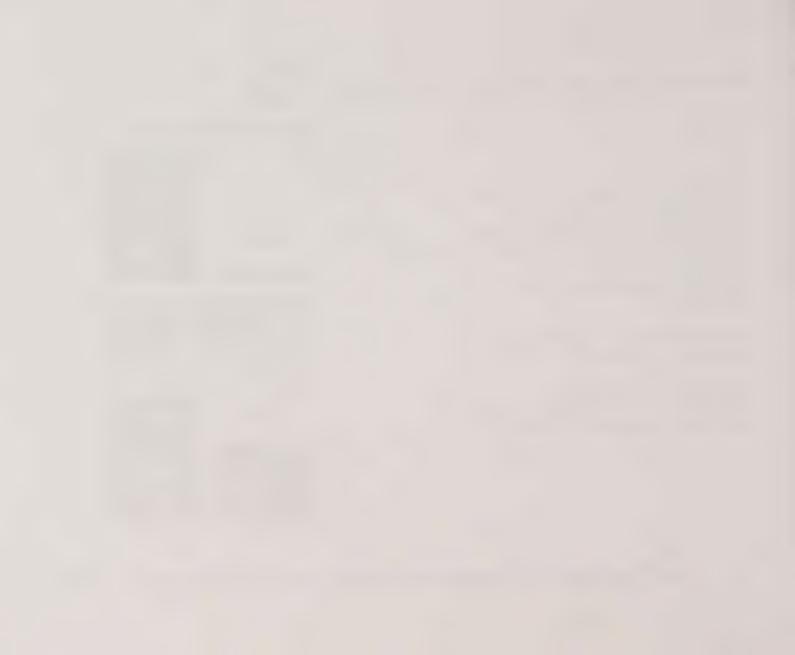




Source: OECD and U.S. National Science Foundation



.but the U.S. businesses spends much more on R&D

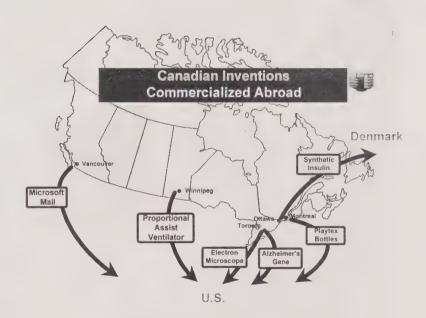


## Just as important, is "commercializing" ideas...

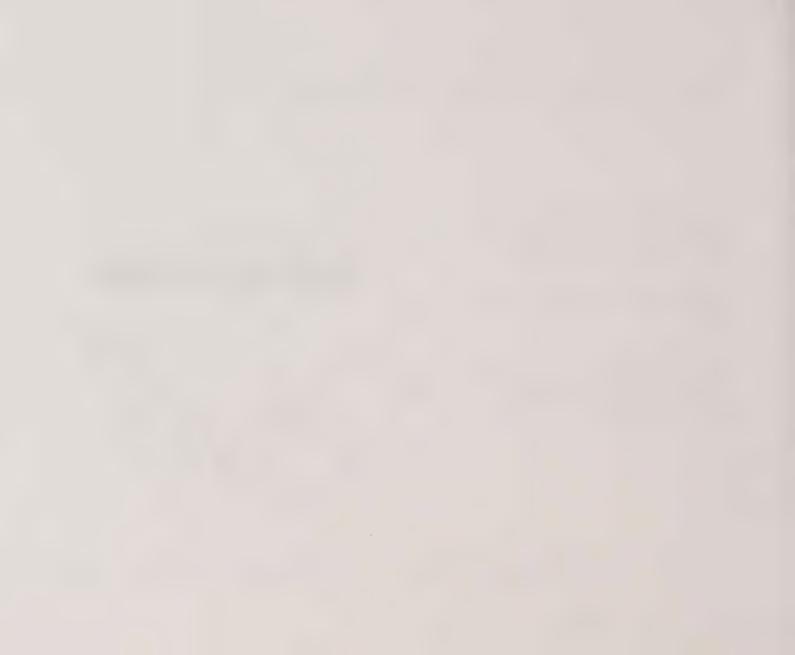
It's not just the creation of ideas and knowledge that is important, but their diffusion and commercialization.

New developments at the interface of commerce and science raise important issues:

 e.g. in the area of regulations/standards and liabilities, and facilitating regulatory and framework policies.



...but we fail to reap the benefits of our inventions



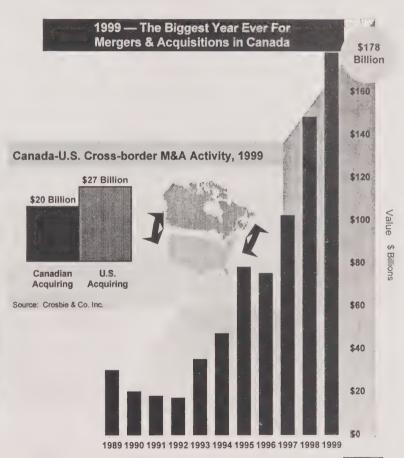
## Tech-change is abetting industrial and corporate restructuring

Technological change, alongside globalization, is facilitating corporate restructuring and merger and acquisition (M&A) activity. New technologies permit the rapid transfer of critical information, enabling companies to invest in a wide range of ventures in the U.S. and around the world. Many mergers involve companies seeking greater pricing power and economies of scale in their increasing globalized markets.

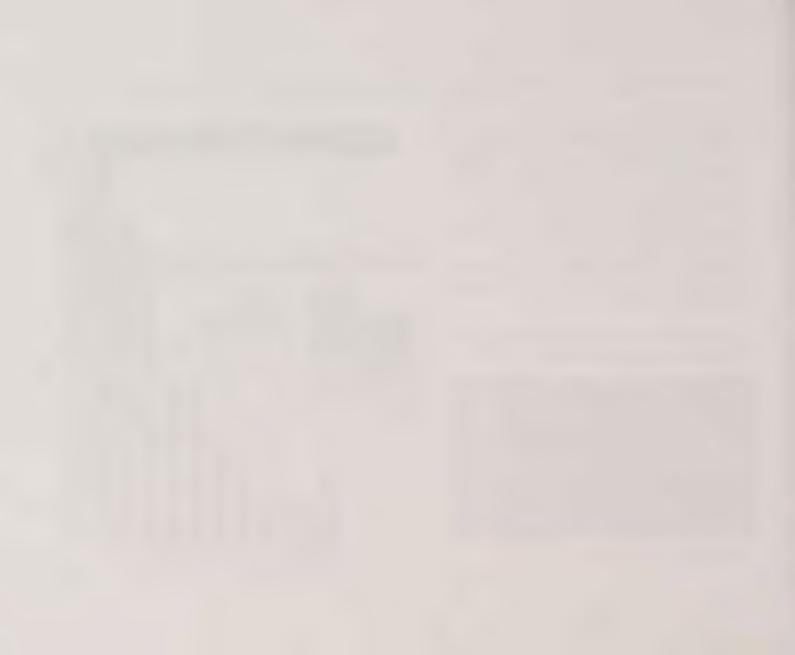
Recently announced M&As involving large Canadian companies include:



<sup>\*</sup> Announced M&As — not necessarily completed Source: Crosbie & Co. Inc.



Source: Mergers & Acquisitions in Canada, Crosbie & Co. Inc.



# How are we Responding & Preparing for the Future?





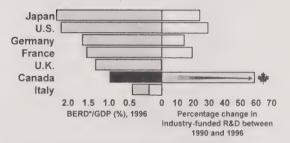


## Business is responding...

Canada's future success hinges on the ability to take advantage of new opportunities associated with the KBE and to meet the challenges of technological change.

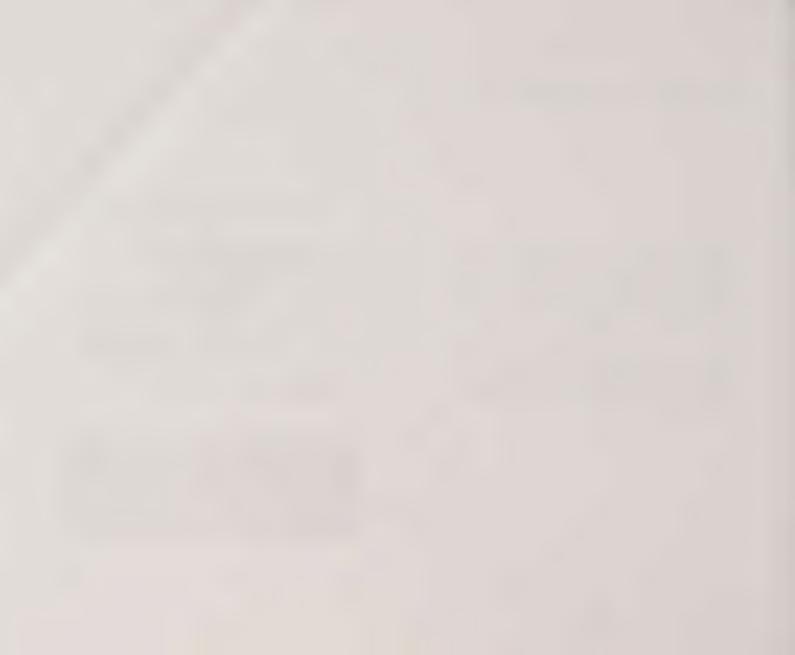
This requires "developing" our current comparative advantages and creating new competitive advantages — based on innovation.

#### **Industry Research and Development**



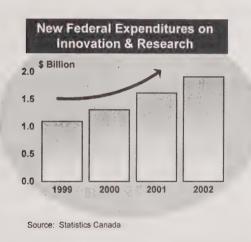
\* Business Expenditure on Research and Development Source: OECD

While our businesses lag in their spending on R&D, they are taking steps to invest more in R&D and technological adoption and developing new comparative advantages.

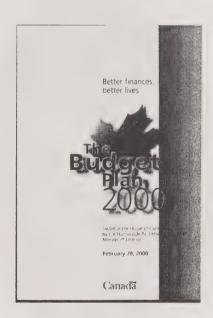


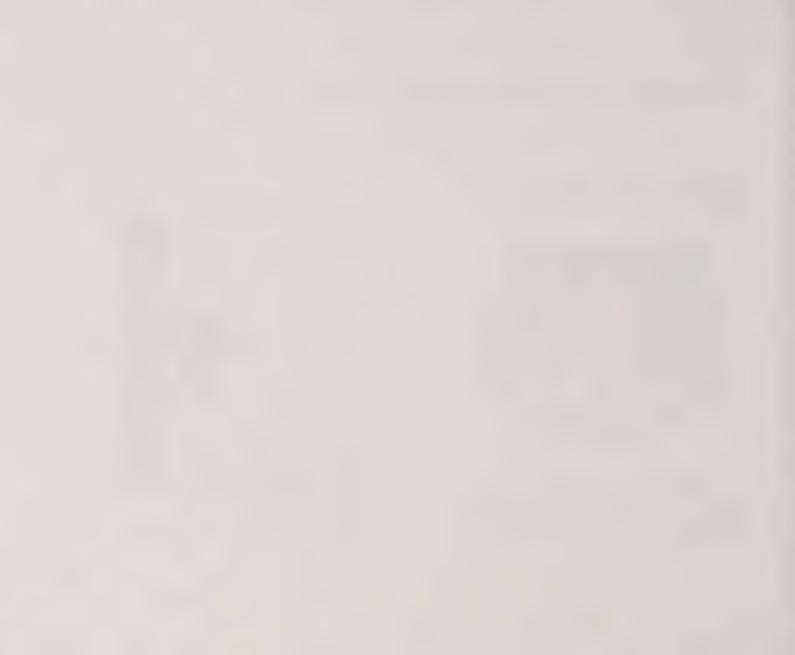
## ...and government is also answering the call

Making Canada's economy more innovative was a major theme of the 2000 budget.



The 2000 federal budget allocated an additional \$1.9 billion in spending over the next four years to promote R&D and innovation in Canada.





# Canada has an Innovation Strategy

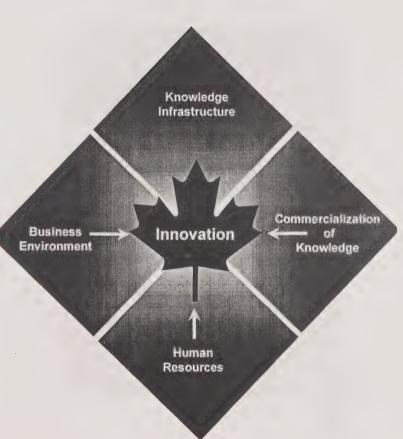
Canada's innovation Strategy addresses:

Knowledge infrastructure — to ensure Canadians are at the forefront of generating new ideas;

Commercialization — to facilitate the necessary partnerships and mechanisms to capture the benefits of new ideas

Human resources — to develop a workforce with the skills and attitudes to make new things happen, and

Business environment — to modernize marketplace policies to keep the Canadian investment climate conducive to growth in the global knowledge-based economy.





# Outlook — more and possibly faster technological change

Over the next decade, most authorities believe technological change will only speed up. Countries whose innovative capacity is developing at a faster clip will be in the best position to take advantage.

Ultimately, all countries are becoming more innovative. Just to "keep pace", countries need to actively focus on adopting and embracing technological change.





Innovative capacity is developing at a faster clip in the U.S. and many other countries.

Michael Porter suggests both Canada and the U.S. must continually improve their innovative performance, or else slip in relative ranking — with dire consequences for the future.

N-4



# Some Key Messages







### Some key messages

Today's technological change is unprecedented — in how it impacts and shapes our economies.

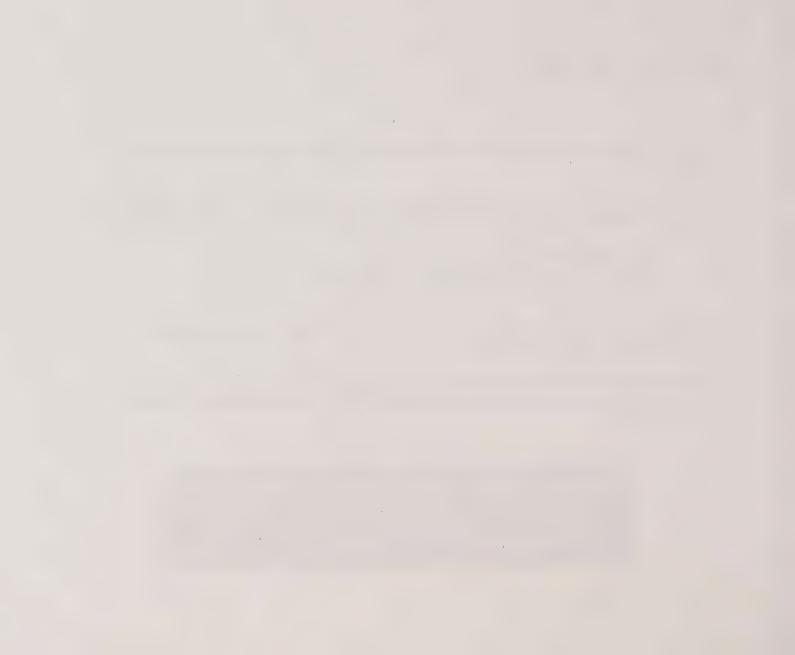
To take advantage of technological change it's paramount we be innovative, whether it be in the business, government or university sectors. This means doing a better job:

- encouraging investment
- building and promoting a knowledge workforce
- creating, developing and commercializing ideas.

It also means pursuing emerging opportunities and the high-knowledge activities required of an innovative economy.

In this quest, we frequently find ourselves competing with our neighbour, the U.S. — a clear worldwide technology leader and premier KBE, and a benchmark to mark our future success.

By doing the right things now, Canada won't be left behind in the 21st century. Rather, we will be able to make our way into the new millennium as a more prosperous country, with good jobs and a globally competitive, KBE.



#### For Further Information

We welcome your questions, comments and suggestions? You can reach us by ...

sending us a letter:

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The *Micro-Economic Monitor* is prepared on a quarterly basis by the Micro-Economic Analysis Directorate of Industry Canada. The Monitor provides a quick and easy-to-read update on Canada's economic performance. It also provides topical in-depth reports on current economic issues from a micro-economic perspective.

The current analysis update was prepared by Marianne Blais, Julie Dubois, Joseph Macaluso, Alison McDermott, and Karen Smith, under the direction of Shane Williamson.

This quarter's feature was prepared with the assistance of Gary Sawchuk from Strategic Initiatives and Aaron Sydor and Nigel Marshman from the Strategic Investment Analysis Directorate. Presentation / data assistance was provided by Caroline Farmer and Danielle Lépine, and translation by Lucie Larocque. Gary Sawchuk is the General Editor of Special Features in the Micro-Economic Monitor.

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